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FLOODPLAIN MANAGEMENT GUIDEBOOK

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Table of Contents

Page
Montana Floodplain Managers Directory . . . . . Inside Front Cover

Acknowledgments vii

Introduction 1
- Why We Need Floodplain Management 1
- Purpose of the Guidebook 1
- Guidebook Organization and Contents 1

Chapter 1: National Flood Insurance Program

- Goals and Objectives 5
- Definitions 5
- Program Overview and Community Responsibility 7
  - Emergency Phase 8
  - Special Conversions 9
  - Regular Phase 9
  - Biennial Report 9
  - Community Assessment Visit (CAV) 10

Chapter 2: Montana Floodplain and Floodway Management Act

- General Provisions 13
- Floodplain Management Section 13
- Floodplain Management Standards 14
- Community Responsibilities 14
- Enforcement 15

Chapter 3: Floodplain Ordinance Standards

- State and NFIP Construction Standards 19
- General Standards 19
  - Anchoring 19
  - Construction Materials and Methods 19
  - Utilities 21
  - Subdivisions 21
  - Encroachments 22
- Specific Standards—NFIP and State Standards 22
  - Residential Structures 22
  - Nonresidential Structures 22
  - Manufactured Homes 22
  - Floodways 22

Chapter 4: Administrative Procedures

- Establishing a Floodplain Development Permit System 27
  - When a Permit is Required 27
  - The Permit Application 27
  - Reviewing the Permit Application 27
- Special Considerations on Permit Reviews 30
  - Floodways 30
- AO-Zones 33
- Acting on the Permit Application 34
  - Applicant's Options 34
- Variances 34
  - Administrative Responsibilities 34

Enforcement 35
  Violations 35
  Penalties for Noncompliance with the NFIP 35
RecordKeeping 36
Local Floodplain Administrator 36
  Administration of the Floodplain Permit System 37
  Watercourse Alteration Notification 37
  Interpretation of Map Boundaries 37
  Submission of Information 37
Denial of Flood Insurance 37
Map Amendments and Revisions 38

Chapter 5: Planning to Reduce Flood Damage

Structural Measures 43
  Dams and Reservoirs 43
  Levees and Floodwalls 43
  Channel Improvements 43
  Watershed Treatment 43
Nonstructural Measures 43
  Zoning 44
  Building Codes/Subdivision Regulations 44
  Stormwater Management 44
  Acquisition and Relocation 44
  Development Policy 44
  Tax Incentives 44
  Information and Education 44
  Flood Forecasting and Warning 45
  Emergency Preparedness 45
  Post-flood Recovery Opportunities 45

Chapter 6: Community Rating System Summary

  The Concept 49
  Community Classification 49
  Operation 50
  Costs and Benefits 50
  Activities Credited under the Community Rating System 50
    Public Information Activities 50
    Mapping and Regulatory Activities 51
    Flood Damage Reduction Activities 51
    Flood Preparedness Activities 51
  First-year Applicant Results 51

Chapter 7: Floodplain Laws, Rules, and Regulations

Montana Floodplain and Floodway Management Act 55
Administrative Rules of Montana 67

Chapter 8: Montana Model Floodplain Ordinance 97

Appendixes

A. Floodplain Development Permit Application Form A-1
B. Elevation Certificate B-1
C. Floodproofing Certificate C-1
D. A Guide to Stream Permitting D-1
E. Agencies Regulating Water-Related Projects E-1
F. Laws and Regulations Governing Water-Related Projects F-1
G. Investigation of Regulatory Violations G-1

H. Violations of Floodplain/Floodway Regulations H-1
I. The Floodway I-1
J. How to Read a Flood Insurance Rate Map with Floodway J-1
K. How to Read a Floodway Map ~~(FBFWM)~~ K-1
L. Reading a Flood Profile L-1
M. About Flood Insurance M-1
N. What to do Before, During, and After a Flood N-1
O. NFIP Community Status Book O-1

Figures

1. 100-year Floodplain 8
2. Mobile Home Anchoring Requirements 20
3. Floodproofing Utilities in Flood-Prone Structures 21
4. New Residential Construction in the Floodplain 23
5. Cross Section View 24
    Floodplain
    Floodplain with Encroachment
6. Locating the Development 28
7. Allowable Floodway Uses 30
8. Floodproofing of Commercial or Industrial Structures 31
9. Floodway Fringe: Residential Structures 32
10. AO-Zone Development 33
11. The LOMA/LOMR Process and Examples 39

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INTRODUCTION

WHY WE NEED FLOODPLAIN MANAGEMENT

Flooding is a natural phenomenon caused by an inundation of rain, melting snow, or ice jams that cause streams to rise and overflow onto normally dry surrounding land. This land that receives sediment deposits from a flood is referred to as a "floodplain." Settlers first were attracted to floodplains for their fertile soil and the water available for domestic use, irrigation, and transportation. Later on, the scenic beauty of waterfront property enticed many people to build homes in these floodprone areas. This insistence on residing in floodplains, however, has caused continual, often-severe social and economic losses in the areas.

Traditional responses to flooding have focused on the protection of existing development through structural works such as dams, diversions, and levees, and on providing emergency relief and recovery assistance to flood victims. Both these approaches have proven extremely expensive and largely ineffective in protecting human lives and property. Flood damage also continues to increase despite large expenditures allocated for flood control projects.

To respond to this trend, the United States Congress created the National Flood Insurance Program (NFIP) in 1968. This legislation provided affordable flood insurance to owners of floodprone property and afforded communities an incentive to adopt state floodplain management ordinances. In 1971, the Montana Legislature passed the Floodway Management and Regulation Act, which enabled the counties to adopt flood-loss reduction standards and to participate in the NFIP.

With the decrease in available federal money, present efforts emphasize nonstructural measures to mitigate flood hazards. Rather than attempting to control rivers, floodplain management's goal is to guide development in a manner consistent with nature's need to produce floods.

PURPOSE OF THE GUIDEBOOK

This guidebook was prepared to help people in Montana understand the NFIP and the Montana Floodplain and Floodway Management Act. Primarily, though, it serves as a resource and guidebook for the local official who must comply both with state laws and NFIP requirements.

The guidebook is designed to help local officials by providing detailed information on federal and state laws and by offering suggestions on how to draft and administer floodplain regulations.

GUIDEBOOK ORGANIZATION AND CONTENTS

Chapter 1 discusses the NFIP, including an explanation of its goals and objectives, the program's emergency and regular phases, and a community's responsibilities as a program participant.

Chapter 2 explains the Montana Floodplain and Floodway Management Act and the administrative rules that implemented the act.

Chapter 3 describes a model floodplain ordinance and the construction standards required by the Montana Floodplain and Floodway Management Act.

Chapter 4 explains how a community should administer its floodplain ordinance and how it should maintain its records.

Chapter 5 lists additional measures a community should consider when implementing a floodplain management program—e.g., disaster preparedness plans and structural flood control works.

Chapter 6 explains the Community Rating System (CRS), its concept, classification, operation, costs, and benefits, along with the credited activities.

Chapter 7 includes the state floodplain management law, the administrative rules related to the law, and the NFIP regulations.

Chapter 8 presents the state's model floodplain ordinance.

National
Flood Insurance Program

CHAPTER 1

GOALS AND OBJECTIVES

The United States Congress created the National Flood Insurance Program (NFIP) in 1968 to offer communities nonstructural approaches toward reducing flood damage. The program's purpose is to make flood insurance available to property owners in floodprone communities in exchange for a community's agreement to guide future floodplain development. The NFIP requires that local governments adopt and enforce floodplain regulations before they can obtain local insurance in their communities. These local regulations also must meet the minimum NFIP requirements established by the federal government.

Congress created the NFIP to address the problem of an increase in annual flood losses. For decades, the federal government's response to flood disasters amounted to building flood control works and providing disaster relief to flood victims. The NFIP operates on the basis of an agreement between the federal government and floodprone communities that choose to participate in the program.

DEFINITIONS

Each of the following chapters includes terms commonly used in both state and national laws. Although generally explained within the text, these words or phrases are defined in this section for your reference.

A-Zone — Found both on Flood Hazard Boundary Maps (FHBMs) and Flood Insurance Rate Maps (FIRMs), A-Zones show the 100-year floodplain and are areas that would be flooded by a base flood. These areas may be labeled as AE, AO, AH, or A1 through A30, or they may be unnumbered. Numbered A-Zones indicate a particular area's flood risk.

Alteration — Any change or addition to a structure that increases its external dimensions.

Appeal — A request for a review of a floodplain administrator's interpretation of any provision of the floodplain regulations, or a request for a variance.

Artificial Obstruction/Development — An unnatural obstruction, including any dam, diversion, wall, riprap, embankment, levee, dike, pile, abutment, projection, revetment, excavation, channel rectification, bridge, conduit, culvert, building, refuse, automobile body, fill, or other analogous structure or matter in, along, across, or projecting into any 100-year floodplain that may impede, retard, or alter the water flow pattern, either in itself or by catching or collecting debris carried by the water, or that is placed where the natural water flow would carry this obstruction downstream to the damage or detriment of either life or property.

Base Flood — The base flood is referred to as the 100-year flood and is a measure of flood magnitude based on probability. The base flood has a 1 percent chance of occurring or being exceeded during any given year.

Base Flood Elevation (BFE) — The flood water level reached during the base flood, also referred to as the 100-year flood elevation. The water surface elevation is referenced as mean sea level (MSL). In other words, a base flood elevation of 3,898 feet, or 3,898 MSL, refers to a water surface elevation of 3,898 feet above MSL.

Channelization Project — The excavation and/or construction of an artificial channel to divert the entire flow of a stream from its established course.

Development — Refers to any man-made change to real estate, including but not limited to buildings or other structures, filling, mining, dredging, grading, or excavation.

Encroachment — Floodplain development results in the restriction of natural overflow areas needed by streams during floods. Each development encroaches on the floodplain's natural conveyance area and may increase the base flood elevation and velocity of flood water. Floodplain development consequently is titled "encroachment."

Establish — To construct, place, insert, or excavate.

Federal Emergency Management Agency (FEMA) — The federal agency that administers the National Flood Insurance Program (NFIP).

Flood or Flooding — A general, temporary condition of partial or complete inundation of normally dry land caused by:
1. the overflow of water, or
2. the unusual and rapid accumulation of surface water runoff from any source.

Flood Boundary—The designated floodplain boundary is the established base flood elevation. Although the mapped floodplain boundary may be used as a guide to determine whether property is located within the designated floodplain, the exact boundary shall be determined according to the base flood elevation.

Flood Boundary and Floodway Map (FBFM) — A map that may be included with the Flood Insurance Study and the Flood Insurance Rate Map (FIRM). It identifies the floodway and, along with the study and the FIRM, provides a technical foundation for floodplain management regulations.

Flood Frequency — Refers to a flood probability of a certain magnitude occurring within a given year. For example, a 100-year flood has the probability of reaching a certain elevation once in a hundred years, or a 1 percent chance of occurring during any given year. Note that since flood frequency is a probability, the possibility exists for a 100-year flood to occur three years in a row, or not at all for 500 years.

Flood Hazard Boundary Map (FHBM) — Usually the first map a community receives from the Federal Emergency Management Agency, the FHBM designates areas of special flood hazard within a given community and serves as the basis both for regulation and insurance for communities in the NFIP's preliminary emergency phase.

Flood Insurance Rate Map (FIRM) — The map on which the Federal Insurance Administration has delineated both the 100-year floodplains and the risk premium zones. This map serves as the basis both for regulation and insurance for communities in the NFIP's regular phase.

Flood Insurance Study — The report in which the Federal Emergency Management Agency provides flood profiles, along with the Flood Boundary/Floodway Maps, water surface elevations, and the Flood Insurance Rate Map. After this study is completed, communities are required to participate in the NFIP's regular phase.

Floodplain — The areas adjoining a stream that would be covered by flood water.

Floodway — The channel of a stream and the adjacent overbank areas that must be reserved in order to discharge a base flood without cumulatively increasing the water surface elevation more than half a foot.

Floodway Fringe — An area in the 100-year floodplain outside the floodway. The floodway fringe is the floodplain area that can be developed without substantially increasing the 100-year flood elevation more than half a foot.

Hydraulics — The science that concerns the transmission of water.

Hydrology — The science that concerns the distribution and circulation of water on the land's surface.

Levee — A man-made embankment, usually earthen, designed and constructed in accordance with sound engineering practices to contain, control, or divert water flow to provide protection from temporary flooding.

Lowest Floor — The lowest floor that is usable, or potentially usable, for living purposes, storage, or recreation, including a basement.

Manufactured Home — A structure that can be transported in one or more sections, built on a permanent chassis, and designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for more than 180 consecutive days.

New Construction — Structures for which construction, substantial improvement, or alteration begin on or after the effective date of local regulations.

Non-Conforming Use — A land use that does not comply with local regulations.

Official Floodplain Maps — The Flood Insurance Rate Maps and Flood Boundary/Floodway Maps provided by the Federal Emergency Management Agency, Special Hydraulic Floodway Maps provided by the U.S. Army Corps of Engineers, or Special Flood Hazard Study Maps provided by the U.S. Soil Conservation Service.

Permit Issuing Authority — The responsible political subdivision, if any, or the Department of Natural Resources and Conservation (DNRC) in the absence of a responsible political subdivision.

Recreational Vehicle — A vehicle that (1) is built on a single chassis; (2) measures 400 square feet or less at the largest horizontal projections; (3) is designed to be self-propelled or permanently towable by a light-duty truck; and (4) is designed primarily for use as temporary living quarters for recreation, camping, travel, or seasonal use—not for use as a permanent dwelling.

Responsible Political Subdivision — A political subdivision that has received Board of Natural Resources and Conservation (Board) approval of its adopted land use regulations and administrative and enforcement procedures in accordance with Section 76-5-302, MCA (Montana Code Annotated), and ARM (Administrative Rules of Montana) 36.15.201 through 36.15.204.

Riprap — Stone, rocks, concrete blocks, or similar material placed along the banks or bed of a stream to alleviate erosion.

Sheetflooding — Areas subject to 100-year flooding with depths of less than 1 foot. Sheetflood areas generally are removed from the main stream channel and have been identified as zones by FEMA or as sheetflood zones by the U.S. Soil Conservation Service.

Special Flood Hazard Area (SFHA) — The land in the floodplain within a community that is subject to a 1 percent or greater chance of inundation within any given year—the 100-year floodplain.

Start of Construction — In the context of this guidebook, the beginning of clearing, grading, filling, or excavation to prepare a site for construction.

Structure — A walled and roofed building, a manufactured home, or a gas or liquid storage tank located primarily above ground.

Substantial Improvement — Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the structure's market value either before the improvement or repair is begun, or, if the structure has been damaged and is being restored, 50 percent of its predamage value.

For this definition, "substantial improvement" is considered to be made with the beginning of the first alteration of any wall, ceiling, floor, or other structural part of the building. A substantial improvement differs from a structure alteration in that a substantial improvement does not affect the structure's external dimensions. The term does not, however, include:

1. any project for improving a structure to comply with existing state or local health, sanitary, or safety code specifications solely necessary to ensure safe living conditions, or

2. any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

Suitable Fill — Fill material that is stable, compacted, well-graded, pervious, generally unaffected by water and frost, devoid of trash or similar foreign matter, devoid of tree stumps or other organic material, and fit to support the intended use or permanent structure.

Variance — A release from the floodplain management regulations that permits construction otherwise prohibited.

Violation — The failure of a structure or other development to comply fully with the floodplain management regulations. A structure or other development without an elevation certificate, certification by a licensed engineer or architect that shows compliance with these regulations, or any other evidence of compliance are presumed to be in violation of regulations until such time as the required documentation is provided.

100-year Floodplain — The area inundated by the 1 percent chance flood constitutes the 100-year floodplain of a river, creek, ditch, lake, or other flood source. This floodplain also is referred to as the Special Flood Hazard Area (SFHA), the area of a community where development must be regulated through a local ordinance that conforms to the NFIP standards and the Montana Floodplain and Floodway Management Act. Illustrations of the 100-year floodplain are shown in Figure 1. Areas that receive less than 1 foot of water per occurrence are not included in the 100-year floodplain.

PROGRAM OVERVIEW AND COMMUNITY RESPONSIBILITY

The NFIP provides flood insurance to towns, cities, and counties that adopt and enforce floodplain ordinances that meet specific minimum requirements.

The extent of these minimum requirements will depend on the amount of flood-hazard data the community receives from the Federal Emergency Management Agency (FEMA). When local governments initially decide to participate in the NFIP, available data usually are limited, and FEMA requires less stringent ordinances than the NFIP. Thus, corresponding insurance coverage is less than complete. This initial step is called the NFIP's Emergency Phase.

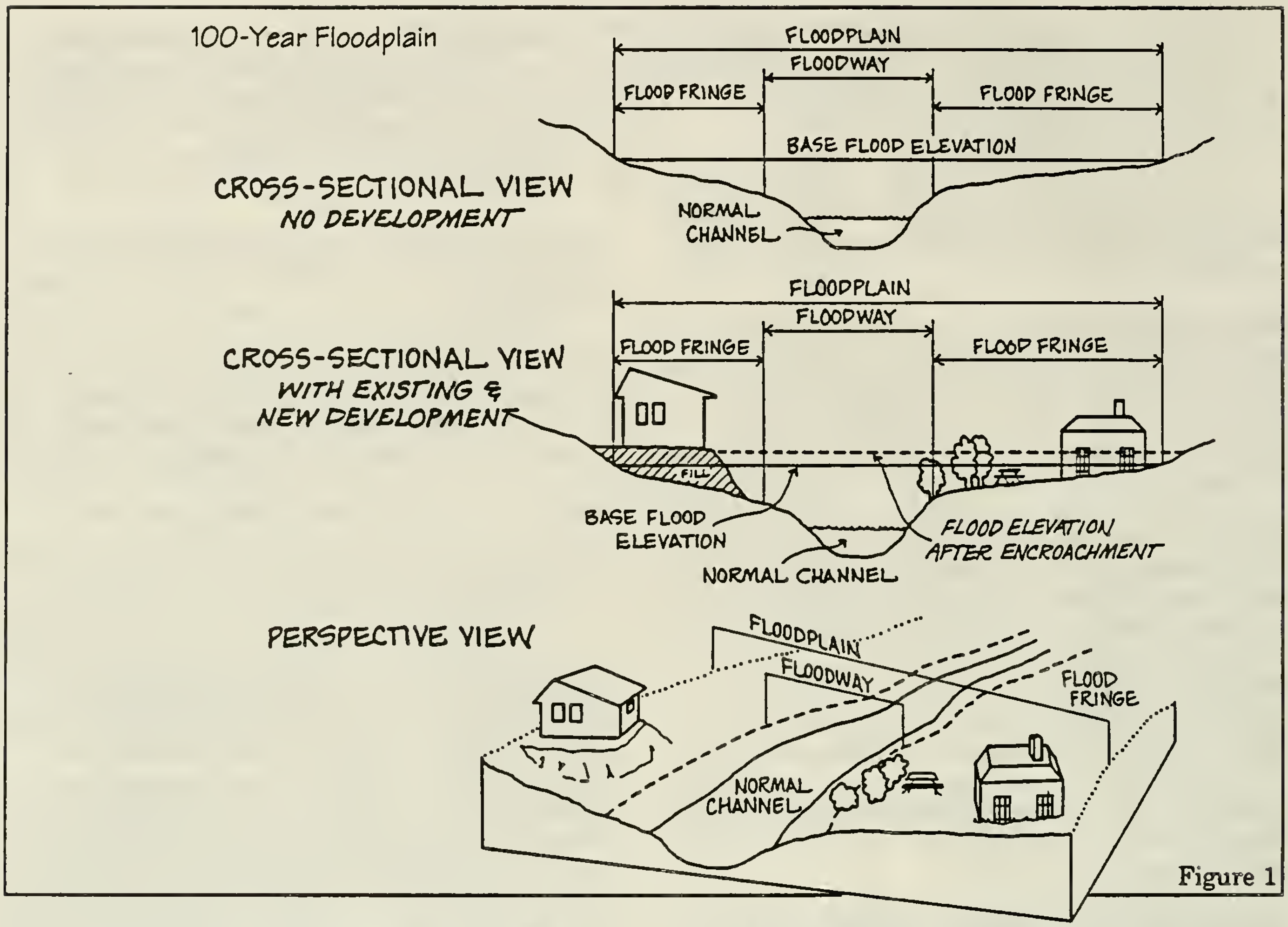
100-Year Floodplain

Figure 1

After detailed flood insurance studies have been completed, the community must enact more stringent regulations. At this time, the full limit of flood insurance coverage becomes available, and the community becomes part of the NFIP's Regular Phase. These two phases of the NFIP, the Emergency and the Regular phases, are described in more detail in the following sections. The "special conversion" process of moving from the Emergency to the Regular phase also is discussed.

Emergency Phase

The Emergency Phase is the NFIP's temporary phase that ended September 1991. Under this phase, FEMA provides the community with a Flood Hazard Boundary Map that identifies general areas in the community that may be flooded in the event of the 100-year flood (base flood). These areas are marked as A-Zones. The community then is required to ensure that any new development in the A-Zones will be protected from the 100-year flood and that the development will not increase the flood hazard to other areas.

A-zones are determined from a study of aerial photographs of past floods or U.S. Geological Survey topographic maps. The local floodplain administrator also may interpret floodplain boundaries by using information acquired in the field if discrepancies arise between actual field conditions and those shown on the mapping.

Specific actions that must be enforced in these A-zones include requirements for (1) proper anchoring of structures, (2) the use of construction methods and materials that minimize flood damage, (3) adequate drainage for new subdivisions, and (4) the location and design of new or replacement utility systems to prevent flood damage.

In addition, participation in the Emergency Phase also requires that a community initiate a permit system for all new construction or development and use this system to ensure that these sites will be reasonably free from flooding.

Note that in certain cases FEMA has not identified flood-hazard areas, but the local government, by participating in the NFIP, has indicated that flood hazards exist.

In either case, the local government must adopt and enforce an ordinance establishing a development permit system that requires new construction to be safe from flooding if it is located in a floodprone area. Because FEMA did not provide the community with detailed flood-hazard information in the NFIP's Emergency Phase, the local government is obligated to use any information source available to implement its ordinance.

Special Conversions

Communities can participate in the NFIP's Regular Phase without having a detailed Flood Insurance Study prepared. FEMA refers to this process as a "special conversion," which takes place when FEMA determines that the flood hazard in the community is minimal and that a detailed Flood Insurance Study is not necessary.

Communities also may be converted with a map that shows no identified flood hazards. A Flood Hazard Boundary Map that exists for the community will be converted into a Flood Insurance Rate Map. This conversion process evaluates flood hazards, people affected, existing floodplain development, and potential future development. The community's floodplain ordinance will be updated as needed to meet existing NFIP standards (your community may have been involved in this special conversion process). The advantages of converting to the NFIP's Regular Phase include:

- retention of flood insurance availability;
- an increase in flood insurance coverage for buildings and their contents; and
- an updated floodplain ordinance for improved management of floodprone areas.

Regular Phase

A community is required to move from the NFIP's Emergency Phase to the Regular Phase when the Federal Emergency Management Agency completes a detailed Flood Insurance Study that defines the community's flood hazards based on hydraulic and hydrologic analyses. This study defines the floodplain limit and divides it into zones that reflect the flood risks. These zones, along with base flood elevations, are shown on the Flood Insurance Rate Map (FIRM). The NFIP's Regular Phase enables residents to obtain increased amounts of flood insurance. (See the FIRM brochure in the pocket inside the back cover of this guidebook.)

The zones that can appear on a FIRM include a variety of A-Zones, B-Zones, and C-Zones. A-1 through A-30 and AE Zones indicate the 100-year floodplain, while AO or AH Zones are shallow flood areas (1 foot to 3 feet in depth), usually the result of sheet flooding or ponding. B-Zones that appear on the FIRM are those areas subject to flooding between the limits of the 100-year and 500-year floods. These zones also can be areas where the average depth of the 100-year flood is less than 1 foot, or where the contributing drainage area is less than 1 square mile. B-Zones also include areas for which levees provide protection from the base flood. C-Zones are areas subject to flooding beyond the 500-year event. B- and C-Zones are shown for informational purposes only; development in these zones does not have to conform to the NFIP or state standards.

The Federal Emergency Management Agency sometimes provides a community with enough detailed information for it to designate a regulatory floodway. This information is displayed on a map called the Flood Boundary and Floodway Map and is referenced in the Flood Insurance Study.

Communities that participate in the NFIP's Regular Phase must adopt and enforce ordinances that require new residential structures in flood-hazard areas to have the lowest floor (including the basement) elevated above the base flood elevation[1]. For areas in which a floodway has been established, the ordinance also must limit development to uses that will increase flood heights, such as agriculture or open space.

Biennial Report

Communities that participate in the NFIP are requested to submit to FEMA biennial reports on floodplain activities. FEMA sends forms to community floodplain administrators every other year to complete and return to FEMA within 30 days. The forms request information concerning any changes to a community's flood-hazard area, development activities within the floodplain, and verification of the number of floodplain residents and structures.

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[1] Montana law, discussed in Chapter 2, requires these structures to be elevated at least 2 feet above the base flood elevation.

Completing the Report

Before completing the report's two sections, correct any inaccurate information on the form. Questions in Section I ask about a floodplain's changes and activities. If the community's territorial limits have changed, be sure to mark "Yes" to Question A and include a copy of the new map.

In Question C, examples of man-made changes include the replacement of culverts and bridges, physical changes that affect characteristics, and construction of dikes or drainage projects. Since they are not considered significant changes, individual or local projects such as resurfacing parking lots, building small retention basins, or making minor drainage improvements do not need to be mentioned.

Question D provides an opportunity to indicate whether a community needs help with its floodplain management program. Check "Yes" if your community needs assistance.

Section Two of the report asks for the number of permits granted in the community's flood-hazard areas only within the past two years. Communities need to report the number of variances (if any) granted to the floodplain ordinance.

The report also asks for a best estimate of a community's population and the number of one- to four-family structures and other structures (schools, churches, businesses, public buildings) located throughout the community. Estimates are required for the community's flood-hazard areas only. Figures that are no longer accurate should be corrected.

When complete, the report must be signed by the person filling out the form and returned to FEMA at the address provided. A file copy of the report should be kept for future reference.

The biennial report lets FEMA know the degree of development pressure on the floodplain. FEMA particularly is interested in variances issued in the floodplain.

Community Assessment Visit (CAV)

FEMA conducts CAVs in Regular Phase communities to evaluate their efforts toward compliance with the NFIP regulations. The primary reason CAVs are made is to help communities identify and solve floodplain management problems.

A CAV also serves as the foundation of FEMA's Community Compliance Program, which outlines procedures for enforcement activities by FEMA under the NFIP. A CAV is the most comprehensive form of FEMA community contact, with a floodplain tour and inspection of floodplain development permit records. Biennial report information is verified at this time, and a community's overall floodplain management program also is evaluated.

Any shortcomings in procedures or enforcement of a local ordinance are identified, and appropriate corrective actions are discussed. When noncompliance with a local ordinance or the NFIP regulations is cited, FEMA expects a community to identify and take the action necessary to correct the problems. FEMA can initiate enforcement action against a community for continual noncompliance.

Montana Floodplain and Floodway Management Act

CHAPTER 2

The Montana Legislature passed the Montana Floodplain and Floodway Management Act in 1971 and amended and revised the Act in 1973. By its approval of the Act, the legislature recognized the need for a united effort between local and state governments to combat recurrent flood damage. It also provided for coordination of this effort between state and federal programs. Communities that comply with the Act are eligible for national flood insurance. See Chapter 7 for the complete text of the Act.

GENERAL PROVISIONS

The Montana Floodplain and Floodway Management Act is comprised of four major parts. Part 1 establishes the need for management and regulation of floodprone land to reduce the flood threat to life and health and to minimize private and public economic losses. Part 1 also summarizes the Act's general provisions, including those for gathering information to identify land unsuited for development due to flood hazards; for land use regulations to distinguish floodways from floodplains; and for minimum standards to balance the greatest public good with the least private injury.

Part 2 of the Act concerns the role of state agencies in carrying out the Act's objectives. The Department of Natural Resources and Conservation (DNRC) is named as the agency responsible for delineating floodplains and floodways for the state's watercourses and drainways. The Board of Natural Resources and Conservation (Board) is charged with designating floodplains (after a public hearing) for which political subdivisions are to establish land use regulations. Citizens may appeal any of the Board's orders. Further powers and duties of DNRC and the Board are presented in the Act itself (see Chapter 7).

Part 3 of the Act focuses on the role played by local government. After receiving floodplain information from the state, officials of a political subdivision have six months in which to adopt land use regulations that meet or exceed the Board's minimum standards. If these regulations are not adopted within six months, DNRC may enforce the regulations. To comply with the NFIP requirements, the Board may, in some cases, shorten the period for adoption of land use regulations.

Part 4 of the Act identifies permissible and nonpermissible land uses for designated floodways and flood-fringe areas. It also provides for a permit system to regulate development in the floodway and flood fringe. More detailed explanations are given in the Act itself (see Chapter 7).

FLOODPLAIN MANAGEMENT SECTION

The Department of Natural Resources and Conservation, through its Floodplain Management Section, is the state agency charged with implementing the Montana Floodplain and Floodway Management Act. The administrative rules for this Act describe the Floodplain Management Section's duties and responsibilities in detail. Several of these are outlined in this section. (See Chapter 7 for complete rules.)

The state law was written to ensure that Montana communities with a high flood risk could receive full coverage under the NFIP. Part of the Floodplain Management Section's responsibility is to identify those communities and ensure their compliance with state law and the NFIP requirements. Since most Montana communities that might be subject to flooding already have been identified by the federal government and have entered into the NFIP's Emergency Phase, the Floodplain Management Section focuses on finding those communities showing the greatest risk of flood damage. These communities need detailed floodplain and floodway studies to effectively manage their floodprone areas, enter the NFIP's Regular Phase, and receive full insurance coverage. Studies required for NFIP participation are contracted by FEMA.

This identification process is conducted in conjunction both with federal and local agencies. Initially, Flood Hazard Boundary Maps and past flood records are used to identify Emergency Phase communities that might be subject to the greatest flood losses. The Floodplain Management Section then meets with local officials to request further information, which it passes on to FEMA to use in its studies. The Floodplain Management Section informs the community on the progress of these studies and encourages local citizens to contribute to them. When FEMA completes its Flood Insurance Study and Flood Insurance Rate Map, the communities become eligible for entry into the NFIP's Regular Phase.

The Board of Natural Resources and Conservation uses the initial information gathered by the Floodplain Management Section, along with the final

Flood Insurance Study and FIRM, as the basis for designating a floodplain or floodway in a given area. The Board's designation provides the necessary legal authority for action.

Once a local ordinance is passed, communities are accepted into the NFIP's Regular Phase and receive the full range of insurance coverage. The Floodplain Management Section is responsible for assisting communities with this conversion process and serves as a liaison between the NFIP and state and local governments. Specifically, the Floodplain Management Section provides information on the NFIP; coordinates federal, state, and local flood-hazard mitigation efforts; develops adequate communication with local governments to achieve state and federal program goals; provides technical assistance to local officials; and assists or substitutes for federal officials when a CAV is conducted.

Bringing communities into the NFIP's Regular Phase is only one of the Floodplain Management Section's responsibilities. Another is helping communities carry out or expand their management activities. The office offers assistance by phone, letter, or personal visit and encourages local administrators to seek help when they need it. The following services are some of those provided by the Floodplain Management Section:

1. Technical assistance in delineating floodplains and floodways.
2. Advice or recommendations on how to prepare and adopt floodplain management ordinances or regulations.
3. Guidance in developing a permit system to administer an ordinance.
4. Technical assistance in reviewing or interpreting hydraulic flood-hazard data supplied to the community by FEMA, the Soil Conservation Service, or the U.S. Army Corps of Engineers.
5. A review of a permit application—in some cases—for a local administrator to determine a proposed project's impact on the base flood elevation.
6. Advice or assistance on how to develop other floodplain management projects, such as flood-warning or flood-fighting plans, structural works to alleviate flood problems, or acquisition or relocation programs.

If the Floodplain Management Section is unable to provide assistance with these activities, it will refer people to other sources for help.

FLOODPLAIN MANAGEMENT STANDARDS

As mentioned previously, state law requires floodplain regulations to be consistent with the NFIP standards. Specific regulations are explained in detail in the next chapter. Several regulations are presented here, however, to emphasize their importance.

1. No use shall be permitted in the floodway that causes any increase in the base flood elevation.
2. Specifically prohibited in the floodway are buildings for human habitation or assembly, along with any objects or structures subject to floating or movement during floods.
3. Residential structures in the flood fringe must have their lowest floors, including basements, elevated 2 feet or more above the base flood elevation.
4. Nonresidential structures in the flood fringe must have their lowest floors, including basements, elevated or floodproofed to 2 feet or more above the base flood elevation.

COMMUNITY RESPONSIBILITIES

The Montana floodplain management administrative rules direct communities with designated floodplains or floodways to adopt land use regulations that comply with state law. By doing so, these communities become eligible for participation in the NFIP. The rules also direct communities to submit these regulations to the Floodplain Management Section, which reviews them to ensure compliance with the intent, purposes, and provisions of the state Act and the administrative rules.

A community can meet the requirements for land use regulations through one of two methods: (1) adopt appropriate changes in existing zoning, subdivision, and building ordinances; or (2) adopt specific floodplain ordinances. Whichever option a community chooses should be the one that most closely meets the community's needs and fulfills its capabilities.

ENFORCEMENT

Any development that violates the Montana Floodplain and Floodway Management Act, the administrative rules that govern floodplain regulations, or local ordinances adopted in accordance with the Act is considered a public nuisance. The Act authorizes the affected community or DNRC to remove the nuisance at the owner's expense. Anyone who violates the provisions of the Act is guilty of a misdemeanor and, if convicted, can be fined up to $100, receive a jail sentence of up to 10 days, or both. Each day's continuance of a violation is considered a separate and distinct offense.

When a violation of the Act is discovered, a local community's legal staff is encouraged to initiate legal action against the person or persons responsible. An injunction should be filed in court as soon as possible in order to stop any construction and prevent hardships.

Communities that fail to adopt and enforce floodplain management ordinances required by the NFIP jeopardize their eligibility to receive any disaster assistance from the federal government—financial or otherwise—in the event of a flood.

Floodplain Ordinance Standards

CHAPTER 3

To comply with the Montana Floodplain and Floodway Management Act and to fulfill the NFIP requirements, communities must regulate floodplain development. This chapter describes a model ordinance that sets construction standards and lists those standards. The Floodplain Management Section prepared this model to serve as a guide; it complies both with state and NFIP requirements. (See Chapter 8 for complete text.)

The model is offered to help communities adopt the necessary floodplain regulations. They may use the model as is, they may make it more stringent, or they may simply use the standards given to amend current ordinances.

STATE AND NFIP CONSTRUCTION STANDARDS

To effectively reduce potential flood damage, federal and state governments both have established standards for new or substantially improved construction projects and other development in identified flood-hazard areas. These standards are described in the following two sections. The NFIP general standards are presented first, followed by the NFIP specific standards and state requirements combined. The model ordinance includes both state and federal requirements for communities with flood elevations and floodways.

GENERAL STANDARDS

These general standards are required of all communities that participate in the NFIP. New or substantially improved construction or development in flood-hazard areas must meet the following standards.

Anchoring

Regulations require that all structures be properly anchored to prevent them from moving off their foundations during a flood. In Montana, anchoring requirements generally are met for most permanent structures through common construction practices. Manufactured homes in special flood-hazard areas must be anchored to resist flotation, collapse, or lateral movement. Anchoring methods may include, but are not limited to, the use of over-the-top or frame ties to ground anchors. The following standards are recommended for anchoring manufactured homes that are not built to uniform building code standards.

1. Over-the-top ties at each corner and two additional ties per side at intermediate locations if the home is more than 50 feet long; if it is shorter, only one additional tie per side is needed.

2. Frame ties at each corner with five additional ties per side on manufactured homes more than 50 feet long; if the home is less than 50 feet long, four additional ties per side are required.

3. Each anchoring system component must be capable of carrying a force of 4,800 pounds, which is equivalent to withstanding a 90 mph wind.

4. Any additions to the manufactured home also must be anchored.

Anchoring requirements for the manufactured home are illustrated in Figure 2.

Construction Materials and Methods

Buildings can be damaged in many ways during a flood: hydrostatic pressure can push in walls or windows, hydrodynamic pressure from waves or debris can batter down walls, uplift can cause structures to float, and the water can warp or decompose walls or floors.

Because of these types of damage, the NFIP requires that new buildings located in flood-hazard areas be built with materials and methods that best resist or minimize flood damage. The most effective method suggested is to elevate a structure's lowest floor above the highest historical flood elevation. For areas where flood elevation data are not readily available, however, other methods will help minimize damage. For example:

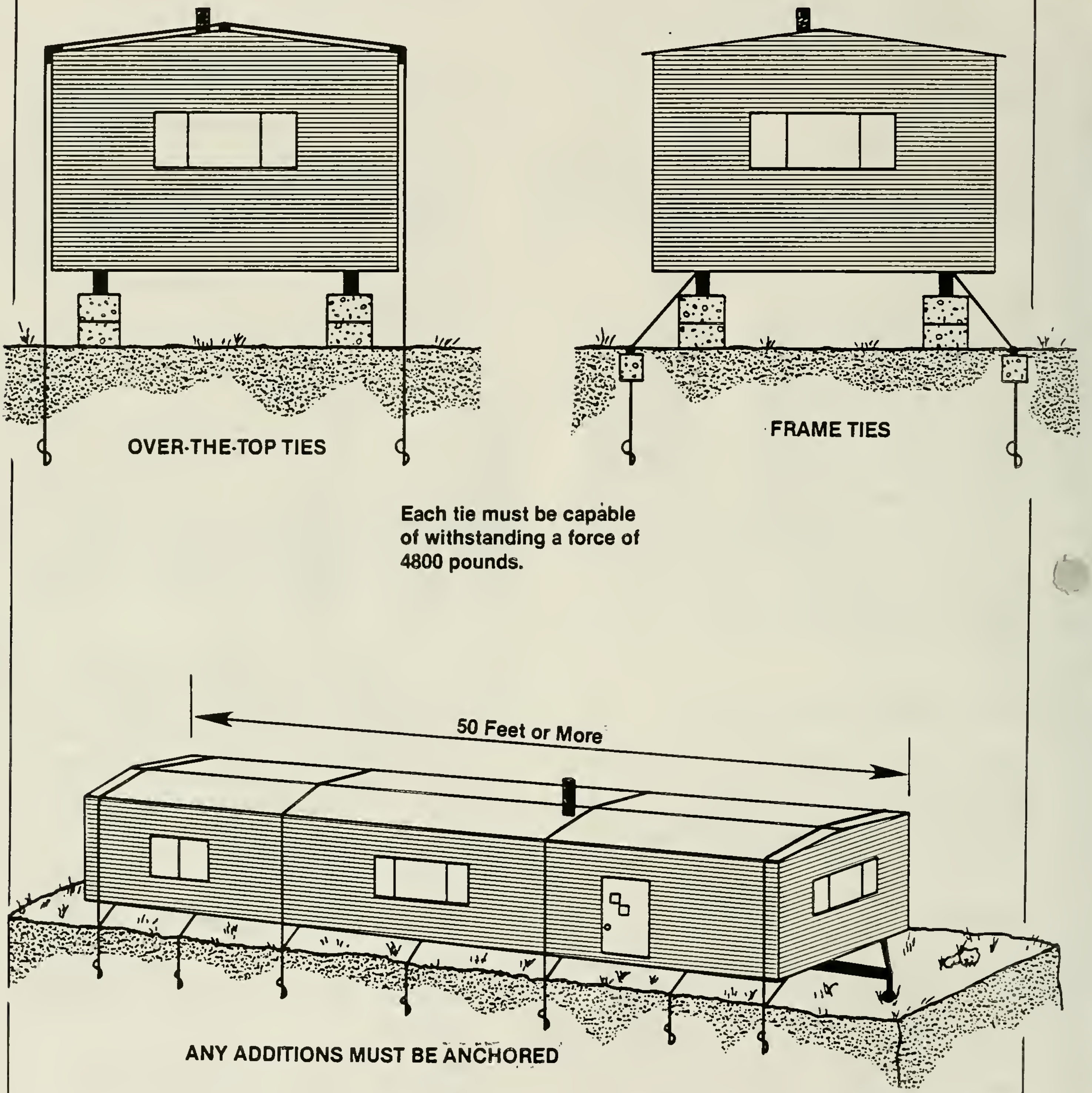
1. All flooring (wood or carpeting) could be made of materials that resist water damage.

2. Subfloors could be made of "exterior" or "marine" grade materials that are water-resistant or waterproof.

3. Structures could be placed so that they least obstruct flood flows, such as the structure's length lying parallel to the stream.

In addition to these suggestions, common sense will suggest other construction practices to reduce flood damage.

Mobile Home Anchoring Requirements



Each tie must be capable of withstanding a force of 4800 pounds.

Access for a hauler must be provided.

Figure 2

Utilities

The NFIP regulations require that new and replacement water supply systems, sanitary sewer systems, and on-site waste disposal systems be designed to minimize or eliminate infiltration of flood water into the systems.

To meet these requirements, local officials must ensure that their systems are designed to prevent infiltration. For example, manhole covers should be located or designed to minimize flood damage. Waste treatment facilities, including pump stations, lagoons, and treatment plants, must be floodproofed. Ring levees also may have to be used to protect waste treatment facilities.

On-site waste disposal and treatment systems such as septic tanks must be designed to minimize flood damage. Since on-site facilities may be located well below the first-floor level of the structure they serve, this requirement may be difficult to meet. Generally, any inlets to or outlets from the septic tank should be equipped with check valves to prevent flood water from returning through the pipes. Even though utilities are permitted by the NFIP and the state Floodplain Management Section under these conditions, the Montana Department of Health and Environmental Sciences (DHES) has regulations that may be more stringent and that also must be met. For examples of utility floodproofing methods, see Figure 3.

Subdivisions

The NFIP requires that new subdivisions be regulated to reduce flood damage. Specifically, the regulations address the need to protect utilities and ensure adequate drainage. For example, electrical, gas, water, and sewer facilities should be protected from flood damage. Gas, water, and sewer systems also should be designed to withstand leakage or

Floodproofing Utilities
in Flood-Prone Structures

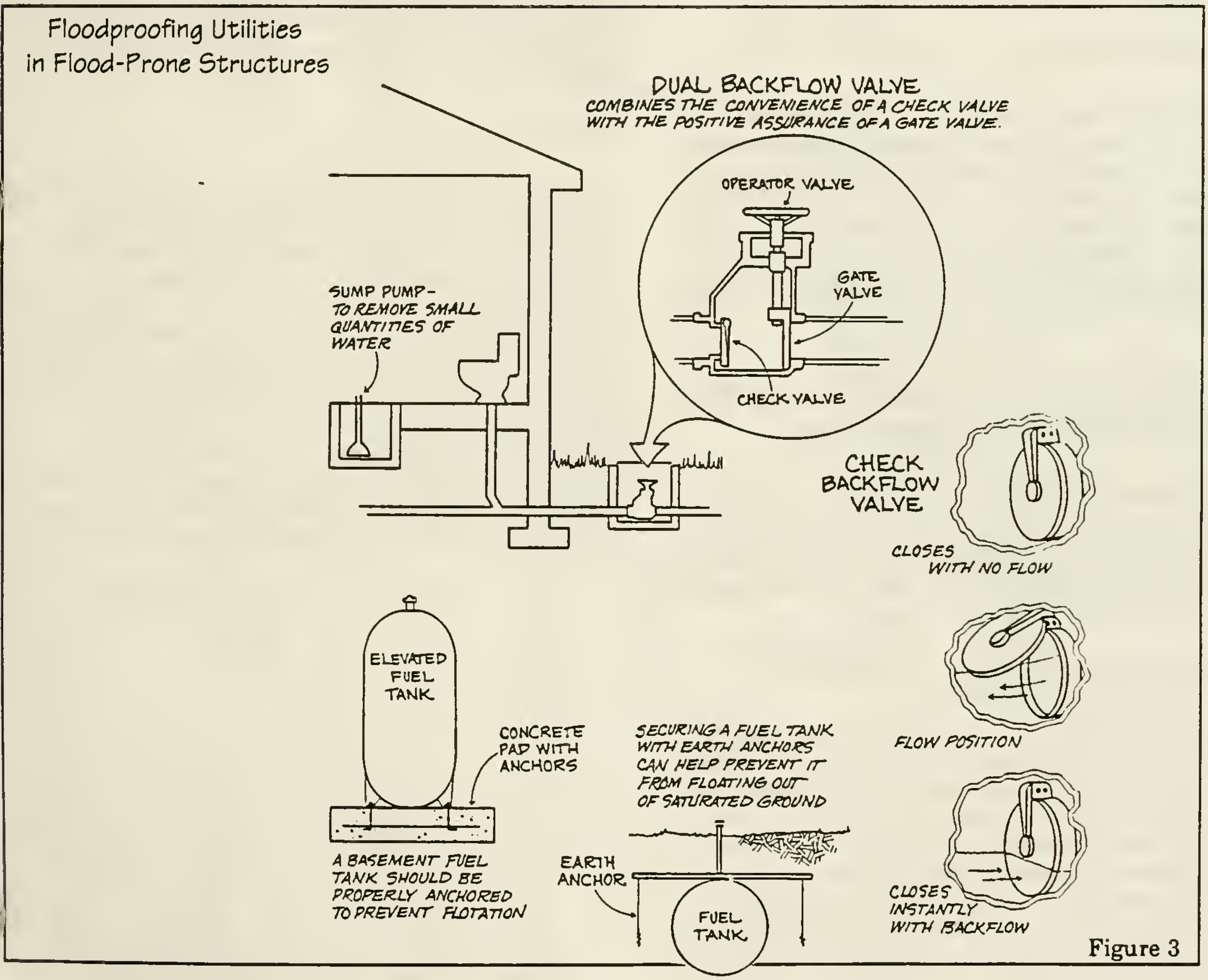

DUAL BACKFLOW VALVE
COMBINES THE CONVENIENCE OF A CHECK VALVE WITH THE POSITIVE ASSURANCE OF A GATE VALVE.
OPERATOR VALVE
GATE VALVE
CHECK VALVE
SUMP PUMP - TO REMOVE SMALL QUANTITIES OF WATER
CHECK BACKFLOW VALVE
CLOSES WITH NO FLOW
FLOW POSITION
CLOSES INSTANTLY WITH BACKFLOW
ELEVATED FUEL TANK
CONCRETE PAD WITH ANCHORS
A BASEMENT FUEL TANK SHOULD BE PROPERLY ANCHORED TO PREVENT FLOTATION
SECURING A FUEL TANK WITH EARTH ANCHORS CAN HELP PREVENT IT FROM FLOATING OUT OF SATURATED GROUND
EARTH ANCHOR
FUEL TANK

Figure 3

rupture during flooding. To provide adequate drainage, building sites should be located at least 2 feet above street elevation, and streets should be designed to drain properly and prevent ponding.

For large subdivisions (50 lots, or 5 acres or more), the developer is responsible for determining the base flood elevation and the floodplain boundary included in the subdivision proposal. A grading plan that shows the proposed finished elevation of streets and building sites also should be included in the proposal. Areas on the grading plan located below the base flood elevation may be used for streets, recreation, and other uses that will not increase flooding. All structures must be located above the base flood elevation.

Subdivision proposals must be reviewed by the Subdivision Bureau of the Department of Health and Environmental Sciences. This department's regulations do not allow soil absorption systems within an identified floodplain.

Encroachments

All development permits must be reviewed to determine whether a proposed action will increase flood stages by significantly obstructing flood water. For communities without base flood elevation data, additional justification is needed for projects that will increase flood heights. The proposal also should provide details on how the project's adverse impacts will be minimized.

SPECIFIC STANDARDS—NFIP AND STATE STANDARDS

In addition to the general standards required by the NFIP, certain specific standards must be met in communities where the base flood elevation has been established. To comply with state law, communities should adopt the following standards.

Residential Structures

For new or substantially improved homes, apartments, and other residential structures, the lowest floor—including the basement—must be elevated 2 or more feet above the base flood elevation. (The lowest floor of structures is illustrated in Figure 4.) In Montana, the method used to elevate structures is to build them on fill. This fill must be properly compacted, brought up to at least the base flood elevation, and extend 15 feet in all directions from the structure. When the fill does not extend above the base flood elevation, the foundation must be raised another 2 feet.

Nonresidential Structures

For all nonresidential structures such as office buildings or stores, the lowest floor—including the basement—must be either elevated or floodproofed 2 or more feet above the base flood elevation.

The floodproofing method used must ensure that the structure is water-tight and that it can resist water pressure during flooding. The community must be assured by a registered professional engineer or architect that the floodproofing method used is indeed effective.

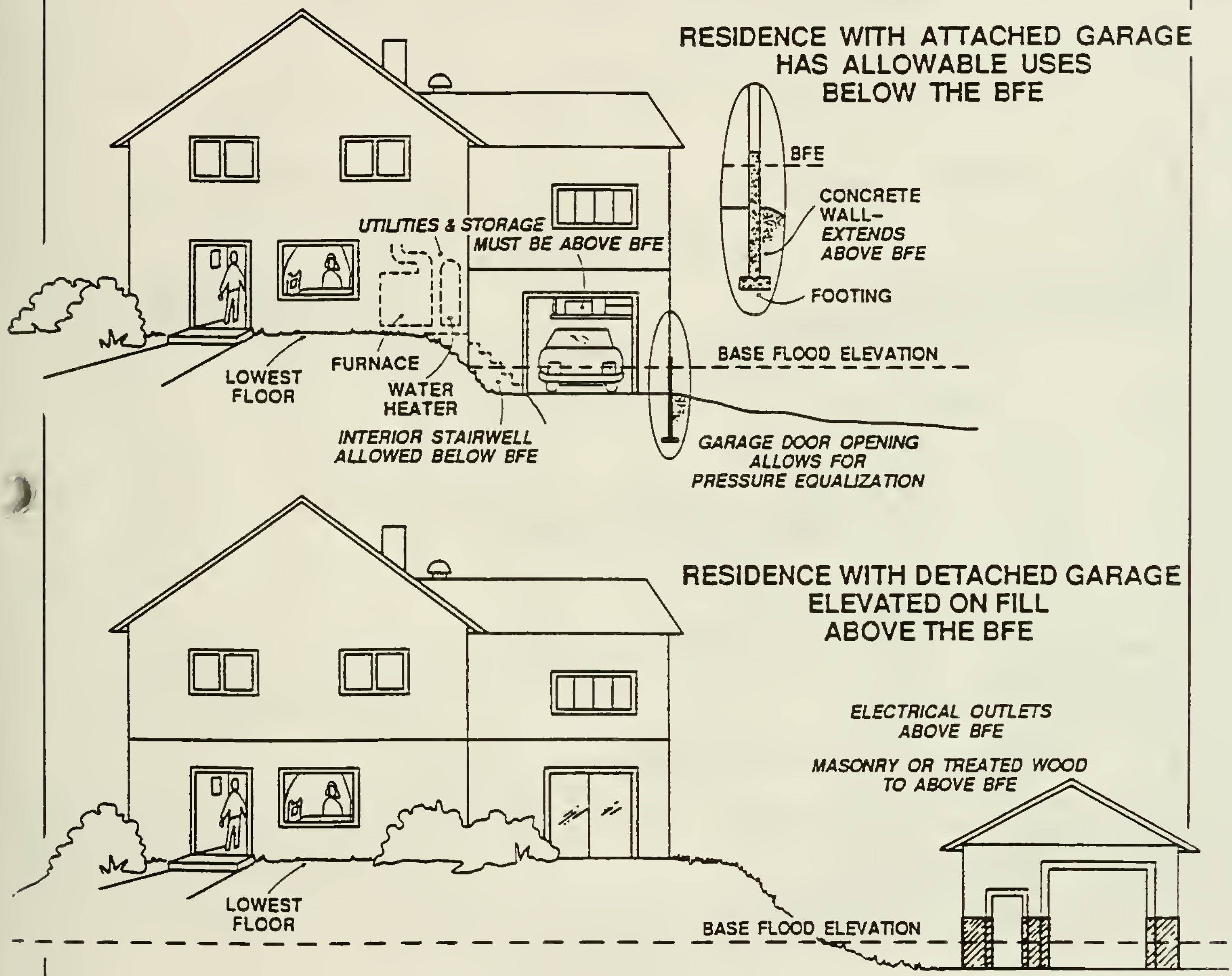
Manufactured Homes

In new manufactured home parks or subdivisions, the manufactured home must be elevated on fill so that the lowest floor is 2 or more feet above the base flood elevation. Access for a hauler also must be provided.

Floodways

Communities with designated floodways (as shown on a Flood Boundary-Floodway Map) are charged with additional floodplain management responsibilities. The floodway is the area within which most developments would increase the base flood elevation beyond the half-foot permitted by the regulations (see Figure 5). Consequently, Montana state law prohibits any encroachments—including fill, new construction, placement or replacement of manufactured homes, or other developments—in the floodway unless it can be shown that the development would not increase flood heights (see "Special Considerations on Permit Reviews—Manufactured Homes" in Chapter 4).

New Residential Construction in the Floodplain



RESIDENCE WITH ATTACHED GARAGE HAS ALLOWABLE USES BELOW THE BFE

BFE
CONCRETE WALL– EXTENDS ABOVE BFE
FOOTING
UTILITIES & STORAGE MUST BE ABOVE BFE
LOWEST FLOOR
FURNACE
WATER HEATER
INTERIOR STAIRWELL ALLOWED BELOW BFE
BASE FLOOD ELEVATION
GARAGE DOOR OPENING ALLOWS FOR PRESSURE EQUALIZATION

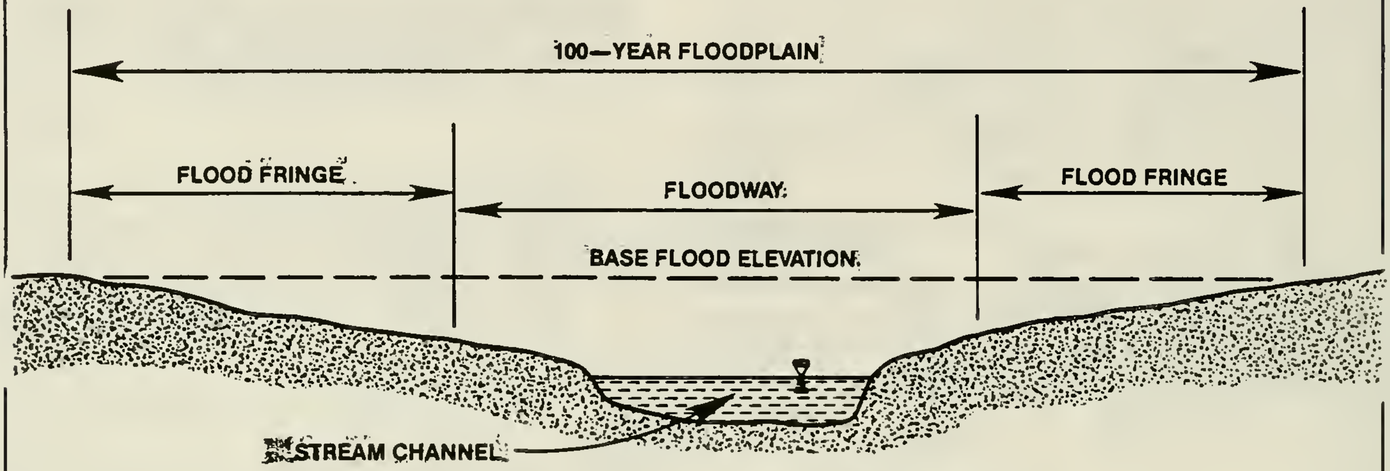
RESIDENCE WITH DETACHED GARAGE ELEVATED ON FILL ABOVE THE BFE

ELECTRICAL OUTLETS ABOVE BFE
MASONRY OR TREATED WOOD TO ABOVE BFE
LOWEST FLOOR
BASE FLOOD ELEVATION

Figure 4

Cross Section View

CROSS SECTION VIEW OF FLOODPLAIN



CROSS SECTION VIEW OF FLOODPLAIN WITH ENCROACHMENT

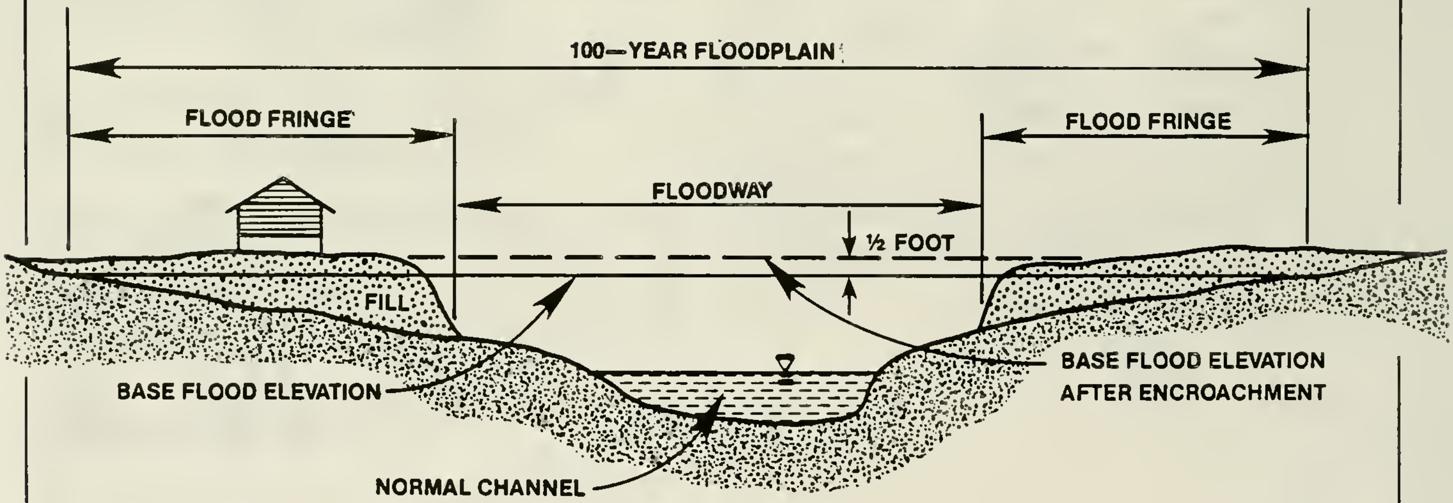


Figure 5

Administrative Procedures

CHAPTER 4

This chapter describes a permit system that communities can implement to regulate development. Some communities may want to vary this system by rewriting certain requirements into existing permit systems. If this is done, however, care must be taken to make sure that all requirements are met. This chapter also discusses variances, enforcement, recordkeeping, and the local administrator.

ESTABLISHING A FLOODPLAIN DEVELOPMENT PERMIT SYSTEM

Communities must ensure that no construction or development take place in an identified flood-hazard area without a permit. Through issuing permits, the community can make sure that the proposed development meets the NFIP and state standards.

Important to note is that the concept of "development" extends beyond the scope of a traditional building permit. A building permit is concerned only with buildings, while a floodplain development permit encompasses alterations to a landscape, such as excavation or the use of fill that would affect drainage patterns or the watercourse's flood-carrying capacity.

When a Permit is Required

A permit is required for building or enlarging a structure, placing a manufactured home, or mining, dredging, filling, grading, paving, excavating, or drilling within flood-hazard areas. In other words, any development activity that may affect flooding or flood damage must have a permit.

Specifically, all structural projects (buildings, manufactured homes, storage facilities, dams, dikes) need a permit. Storage of flammable, toxic, or explosive materials shall not be permitted.

The Permit Application

Anyone wishing to develop in a floodplain must obtain a permit application from the local administrator and submit it for approval before beginning any actual development. (A sample development permit application is shown in Appendix A.) Communities also may adapt their existing permit systems to meet state and NFIP requirements. No matter which form is used, however, a permit application for floodplain development is required. This application must show a complete description of the proposed activity and include enough information so that the local administrator can tell whether the proposed activity will be safe from flooding or whether it will increase flood hazards elsewhere. At a minimum, plans should be drawn to scale on a surveyed plat that shows:

- the mean sea level (MSL) elevation of the lowest floor, including the basement of all proposed structures;
- the MSL elevation to which any proposed nonresidential structures will be floodproofed;
- certification by a registered professional engineer or architect that the chosen floodproofing method meets the NFIP floodproofing criteria;
- base flood elevation data for subdivisions of 50 lots, or 5 acres or more (if not given on the FIRM, this data must be provided by the developer); and
- a description of the extent to which any watercourse (stream, river, drainage ditch) will be altered or relocated.

The permit application form shown in Appendix A includes a section to be completed by the local administrator. In this section, the administrator lists the data base used during a review of the permit application. The administrator specifies whether the proposed development is located in the floodway, flood fringe, or approximate floodplain (no elevations) and also gives the proposed site's base flood elevation. Including this information on the application may prove useful later if the applicant questions the technical basis for the permit.

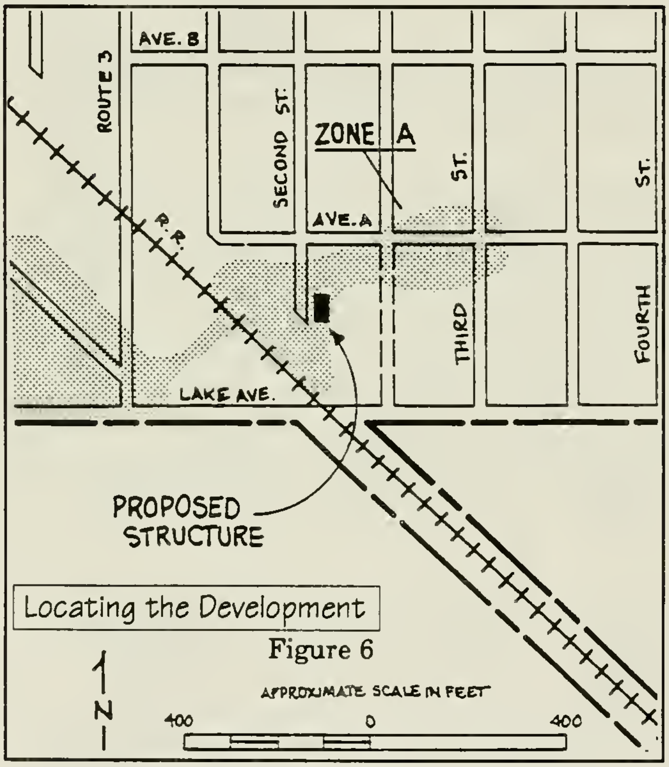
On the reverse side of the application form is a section titled "Building Elevation and Compliance Certification." This section should be completed after the developer has provided the local administrator with certification from a registered professional engineer or land surveyor that the permitted structure actually was built at least to the elevation required by the permit.

Reviewing the Permit Application

Reviewing a permit application is the local administrator's most important responsibility, and developing a checklist to determine whether proposed projects meet floodplain ordinance criteria may prove helpful. Several factors must be considered during a review of any permit application. For some projects, depending on their types or locations, special considerations must be included in the review procedure. The items that a local administrator must consider for all cases are listed on the following pages. Special considerations then are explained.

1. Locate the Development

The local administrator must determine whether the proposed development is located in the 100-year floodplain. If this is not obvious, the administrator should determine the distance in the field between the proposed development site and one or more identifiable points (e.g., the center line of a street, a bridge, the river channel). Using the map scale, the administratior then should convert the distance from the identifiable point on the map to the site. By doing so, the adminstrator can decide whether the proposed development is located in the 100-year floodplain (see Figure 6).



Locating the Development

Figure 6

2. Determine Whether the Application is Complete

The local administrator should make sure that the application is complete. It should include a thorough description of the proposed development, the elevation of any structures, certification of any floodproofing methods, and base flood elevation data for subdivisions of 50 lots or 5 acres or more.

If the administrator cannot determine from given data whether the development will be safe from flooding, he or she should request more information from the applicant.

3. Determine the Base Flood Elevation

In order to review a permit application, the local administrator must know the 100-year or base flood elevation at the development site. If the administrator has a Flood Insurance Rate Map and Flood Insurance Study, base flood elevation data for the development site are readily available. Reports from other federal or state agencies also may be available, such as flood hazard analyses from the Soil Conservation Service or the U.S. Army Corps of Engineers, or studies conducted by DNRC or the U.S. Geological Survey.

In A-zone areas for which no elevation data are available from FEMA or any other source, the floodplain administrator still has several options. Alternate sources of flood elevation data are listed below.

- Find aerial photos of past floods (sometimes available from the Department of Transportation).
- Look for high water marks on buildings, telephone poles, bridges, or other structures.
- Scan newspaper accounts or photos of past floods.
- Request assistance from the Soil Conservation Service or U.S. Army Corps of Engineers to do a flood study. The U.S. Geological Survey can determine flood magnitudes of past floods. For example, if you have aerial photos of a particular flood, the USGS at times has discharge data available to determine the flood magnitude. (Flood magnitude is measured by percentage of occurrence, such as a 10-year flood, 25-year flood, 100-year flood, etc.)

Once the local administrator obtains the flood-hazard data, a review of the proposed project's description in relation to the flood hazard will determine whether the project would be safe from flooding. For example, if available information shows a base flood elevation of 4,930 feet MSL, and the permit application indicates that the proposed structure will have its lowest floor built to an elevation of 4,927 feet MSL, the project structure will be subject to 3 feet of water during a base flood. The local administrator must not grant a permit for this structure unless the applicant agrees to elevate the project 2 or more feet above the base flood elevation. As another example, suppose a proposed project with a basement is located in a special flood-hazard area (100-year floodplain) on the Flood Hazard Boundary Map, and the local administrator knows from newspaper accounts that this area of town suffers from street and basement flooding during rainstorms. In this case, the administrator may issue a permit only if the structure is built without a basement.

4. Other Considerations

The local administrator must make sure that a proposed activity meets the Montana Floodplain and Floodway Management Act standards that were explained in Chapter 3. During a review of any application, the key points upon which to focus are that the proposed activity must be safe from flooding and that it must not increase flood hazards in other areas.

5. Additional Permits

The local administrator should be able to tell an applicant when an additional permit may be required. The following regulations may apply to projects evaluated by the local administrator.

a) **Montana Water Quality Act.** This law established surface water quality standards and a permit program to control the discharge of pollutants into state water. A permit must be obtained before any discharge takes place. The Department of Health and Environmental Sciences administers this law.

b) **Natural Streambed and Land Preservation Act (310 Permit).** This act requires individuals or private organizations to receive approval from their local conservation districts before beginning any development on private or public land within the high water marks of a perennially flowing stream.

c) **Stream Protection (124 Permit).** This law declares that state, county, or municipal government agencies must notify the Department of Fish, Wildlife and Parks when any construction project will obstruct, damage, diminish, destroy, change, modify, or vary the natural existing shape and form of any stream or its banks or tributaries. Projects undertaken by established irrigation districts are exempt from this law. Federal agencies, however, although not under state jurisdiction, are asked to comply with the law.

d) **Federal Water Pollution Control Act-Clean Water Act (404 Permit).** Section 404 of this act requires that a permit be obtained from the U.S. Army Corps of Engineers before dredged or fill material can be discharged into any United States water or onto adjacent wetlands. Some minor activities are allowed by nationwide or general permits.

e) **River and Harbor Act.** Section 10 of the River and Harbor Act of 1899 requires that a U.S. Army Corps of Engineers permit be obtained before any work can begin in navigable waters of the United States. The Kootenai River is considered a navigable water of the United States from Jennings upstream to the Canadian border. The Seattle District can give permit requirements on this waterway. The Missouri River from Three Forks to the North Dakota state line and the Yellowstone River downstream from Emigrant also are considered navigable waters. The Omaha District of the U.S. Army Corps of Engineers should be contacted for permit requirements on these rivers.

f) **Lakeshore Protection.** This permit program, which is administered by county commissioners, is similar to that for the protection of floodplains. County planning offices have information and permit applications available.

g) **E.O. 11988 Floodplain Management and E.O. 11990 Protection of Wetlands.** These executive orders apply to federal agencies and provide guidance for actions related to the nation's floodplains and wetlands, whether federally or privately owned.

The federal government is responsible for influencing activities to avoid floodplain and wetland development whenever practical alternatives exist. Local agency offices also should be contacted.

h) **Water Rights.** Before anyone can divert or impound water for a new use, or change an established water use in any way, a permit from DNRC is required. This also includes water removed from a stream for dredging mining. Local water resources regional offices can provide details.

SPECIAL CONSIDERATIONS ON PERMIT REVIEWS

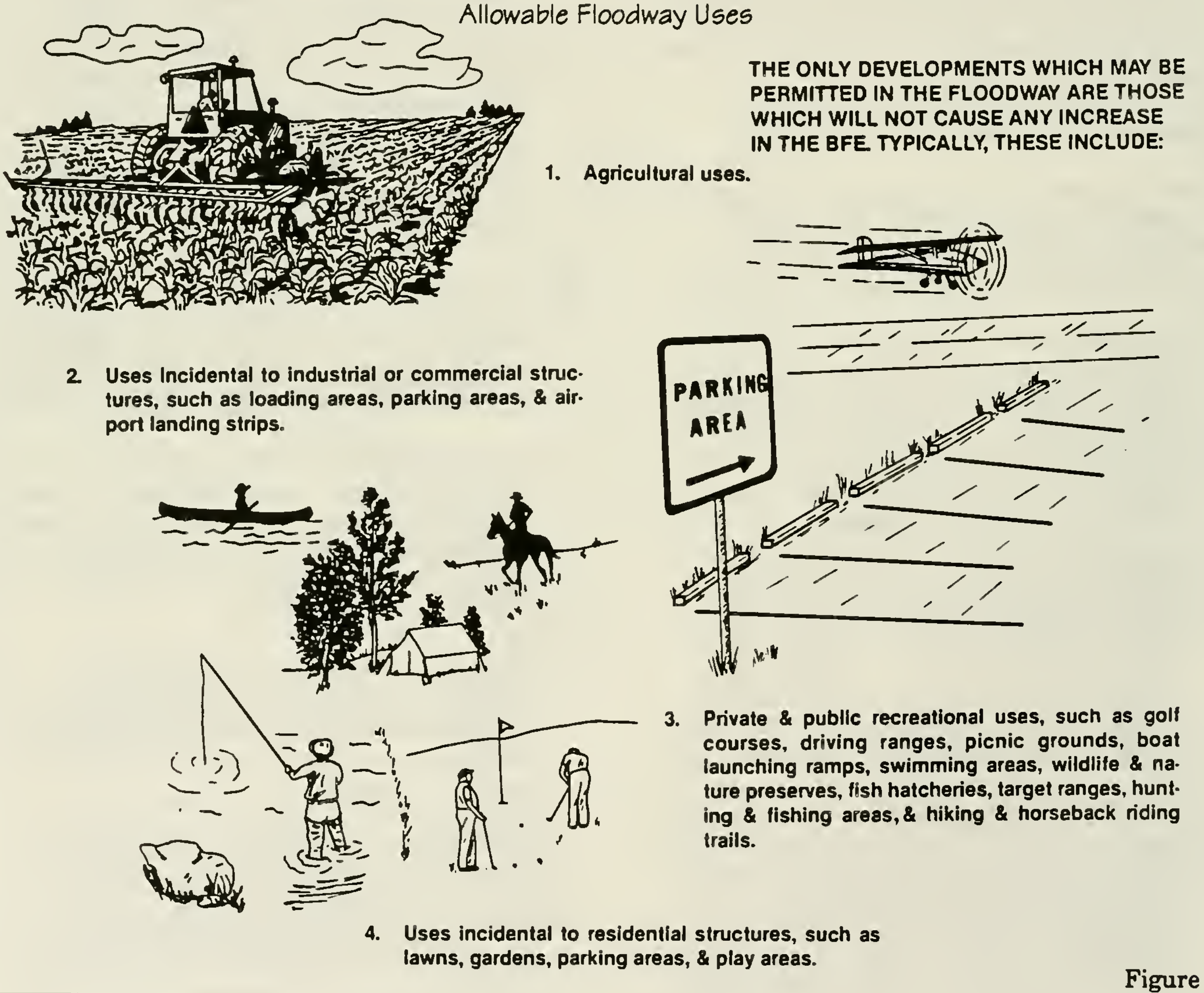
Floodways

If a community has a regulatory floodway, and if the local administrator determines that the proposed development is located within the floodway, a permit may not be issued unless the applicant can demonstrate that the proposed development will not increase flood heights. Such developments usually are limited to open-space uses for recreation or agriculture. Existing structures in a floodway prior to floodway identification are "grandfathered" in and, therefore, not subject to floodplain regulations. Any substantial improvements (50 percent or more of the market value) to such structures, however, must comply with the floodplain ordinance.

1. Allowable Floodway Uses

The only developments that may be permitted in a floodway are those that will not increase the base flood elevation (see Figure 7). These typically include:

- uses incidental to industrial or commercial structures, such as loading areas, parking areas, and airport landing strips;
- private and public recreational uses, such as golf courses, driving ranges, picnic grounds, boat-launching ramps, swimming areas, wildlife and nature preserves, fish hatcheries, target ranges, hunting and fishing areas, and hiking and horseback-riding trails; and
- uses incidental to residential structures, such as lawns, gardens, parking areas, and play areas.



Allowable Floodway Uses

THE ONLY DEVELOPMENTS WHICH MAY BE PERMITTED IN THE FLOODWAY ARE THOSE WHICH WILL NOT CAUSE ANY INCREASE IN THE BFE. TYPICALLY, THESE INCLUDE:

1. Agricultural uses.
2. Uses incidental to industrial or commercial structures, such as loading areas, parking areas, & airport landing strips.
3. Private & public recreational uses, such as golf courses, driving ranges, picnic grounds, boat launching ramps, swimming areas, wildlife & nature preserves, fish hatcheries, target ranges, hunting & fishing areas, & hiking & horseback riding trails.
4. Uses incidental to residential structures, such as lawns, gardens, parking areas, & play areas.

Figure 7

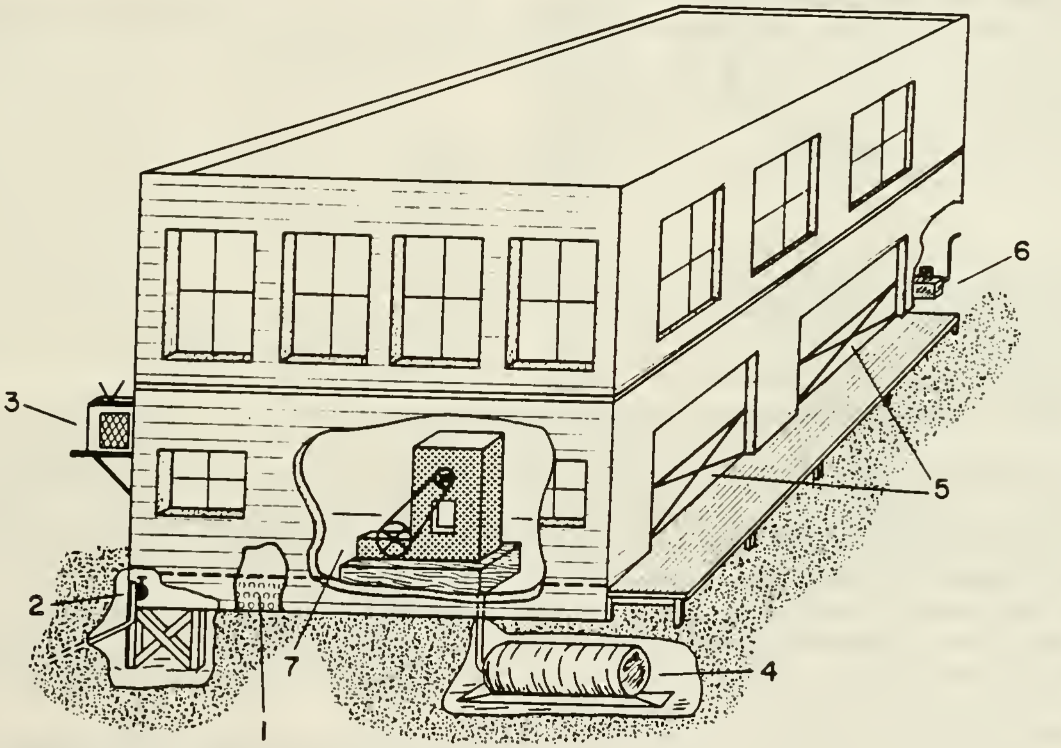
2. Nonresidential Structures

The NFIP regulations allow nonresidential buildings (commercial structures, garages, warehouses) the option of floodproofing rather than elevation as a means of protection from the base flood. Floodproofing focuses on designing a structure in such a way that all of the structure's parts located below the base flood elevation are watertight and resistant to flood damage. One method of floodproofing is known as dry floodproofing, which is illustrated in Figure 8.

Dry floodproofing means that a structure's actual design provides protection from the base flood. The structure must be designed to prevent seepage, collapse, or cracking of basement walls, buckling of basement floors, and water back-up from sewer lines. Walls and floors must be able to withstand hydrostatic pressure, and all openings must be located 2 feet above the base flood elevation. Walls and floors must be watertight, with waterproof seals and coverings used on exterior surfaces. The building must have sufficient weight to resist flotation. Features of dry floodproofing must operate automatically without human intervention. Floodproofing measures on nonresidential structures must be certified by a qualified engineer or architect.

Another method of floodproofing nonresidential structures under the NFIP relies on human intervention. This method involves using door and window shields as temporary protection from the base floods and should be used only in instances where adequate flood warning time or devices are present. Extreme caution must be used in the design of this floodproofing measure. Door and window shields generally are not effective for flood depths that exceed 3 feet, and they may cause more damage to older structures than they prevent.

Floodproofing of Commercial or Industrial Structures



1. Impermeable membranes to two feet above BFE.
2. Valve on sewer line to prevent back flow.
3. Power service equipment raised to two feet above BFE.
4. Underground storage tank properly anchored.
5. Steel bulkheads for doorways.
6. Sump pump and drain to eject seepage.
7. Internal floors and walls made of materials resistant to flood damage to two feet above BFE.
8. Automatic shut-off valves on furances and fuel supply lines.

Figure 8

3. Residential Structures

Residential structures must be elevated rather than floodproofed. The lowest floor of a residential structure must be elevated 2 or more feet above the base flood elevation. It also must be placed on a pad of compacted fill that either equals or exceeds the base flood elevation. The pad must extend 15 feet from the structure in all directions (see Figure 9).

The NFIP regulations require a community to obtain and maintain records of the lowest floor elevations of all new or substantially improved structures in a flood-hazard area. To comply with this regulation, communities must require the owners or developers of such structures to provide an "Elevation Certification" once the structure is completed. See Appendix B for a sample of an Elevation Certificate.

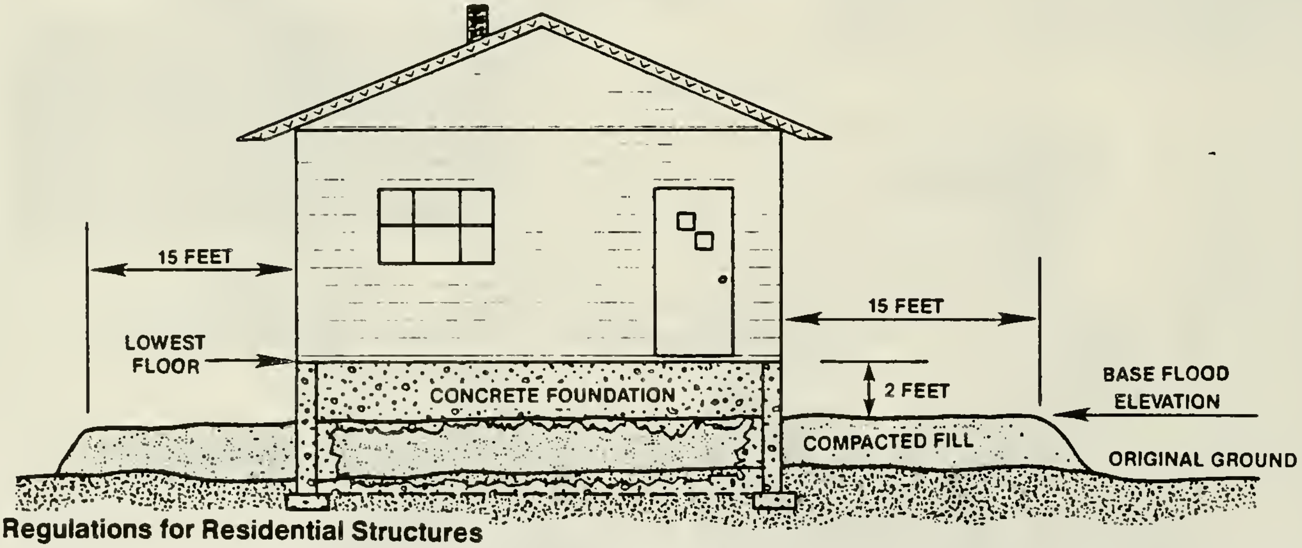
4. Subdivisions

The NFIP regulations require that developers supply base flood elevation data for projects that exceed 50 lots, or 5 acres. The intent of this requirement is to gather base flood elevation data that can be used to require floodproofing of new construction. Any elevation data used to satisfy this requirement will, in turn, serve as the basis of elevation and floodproofing standards for structural development in a subdivision.

Accordingly, the elevation data supplied by the applicant for subdivision plat approval should be consistent with the proposal's scope and scale. For instance, if an applicant proposes to subdivide 20 acres of rural land into four equal parcels with no immediate construction planned, only the most basic elevation data would be necessary. However, if a developer proposes to subdivide 20 acres of land into 80 lots, the developer would need to obtain data as sophisticated as that required by the Flood Insurance Study.

To determine how detailed an applicant's base flood elevation data should be, the local administrator should request the following information from an applicant:

Floodway Fringe: Residential Structures



Regulations for Residential Structures

1. The new residential construction, alteration, and substantial improvement must be constructed on suitable fill so that the lowest floor elevation (including basement) is two feet or more above the BFE. The fill elevation is to be no lower than the BFE and shall extend for at least 15 feet beyond the structure in all directions.

2. Suitable fill is material which is stable, compacted, well graded, pervious, generally unaffected by water and frost, devoid of trash and organic material, and is fitted for the purpose of supporting the permanent structure.

3. It must be anchored to prevent flotation or collapse. Mobile homes must use over-the-top and frame ties at each corner and additional ties per side at intermediate points. Any additions must be similarly anchored. Normal use of anchor bolts for residential structures is adequate.

4. Adequate surface drainage must be provided.

Figure 9

- the size and complexity of the proposed subdivision;
- the percentage of the subdivision area that would be floodprone; and
- the intended use of the floodprone area (i.e., structural development, open space, parking).

This type of information allows the local administrator to determine the extent of the flood hazard in the subdivision and, consequently, the detail needed for an applicant's base flood elevation data.

5. Manufactured Homes

In reviewing a permit to place a manufactured home in a special flood-hazard area, the local administrator must determine whether the proposed site of the manufactured home is the floodway or the floodway fringe. State law does not allow placing or replacing a manufactured home in a floodway.

The placement, replacement, alteration, or substantial improvement of a manufactured home in the floodway fringe is required to be elevated so that the lowest floor is at least 2 feet above the base flood elevation and securely anchored to a foundation system that will resist flotation, collapse, or lateral movement. Anchoring methods may include, but are not limited to, over-the-top or frame ties to ground anchors. The home can be elevated on fill or raised on a permanent foundation of reinforced concrete, reinforced mortared block, reinforced piers, or other foundation elements at least equally strong.

The placement, replacement, alteration, or substantial improvement of manufactured homes in an existing manufactured home park or subdivision in the floodway fringe must be raised on a permanent foundation. The lowest floor must be raised at least 2 feet above the base flood elevation, and the foundation must consist of reinforced concrete, reinforced mortared block, reinforced piers, or other foundation elements at least equally strong.

6. Watercourse Alterations

Whenever a local administrator reviews a development permit that includes a watercourse alteration (for example, realignment or diversion of a stream, ditch, or river), the administrator must be satisfied that the watercourse's flow-carrying capacity will not be diminished. To do this, a permit applicant must supply a thorough description (a set of plans and calculations) of the proposed alteration and its effect on flows. If the administrator does not have the technical background to review these types of descriptions, he or she must rely on the community's engineering staff, the state Floodplain Management Section, or other outside professional assistance. During the review, the administrator should look for the following basic items:

1. A determination that the watercourse's hydraulic capacity will remain the same or increase after the alteration. For example, if a new road crosses a stream or coulee, culverts beneath the road must not place undue constriction on the channel and cause flood water to back up.

2. Maintenance of channel stability. Several factors related to channel stability can either influence or change a watercourse. For example, a channel's alignment and grade or the material on its banks and bottom can affect flow velocity that, in turn, may cause erosion.

Generally, an applicant should provide the floodplain administrator with a topographic map of the area in question, a comparison of existing and proposed channel capacities, a description of the proposed alteration, the land use of adjacent properties, a description of any obstructions, and photos of the area.

Regulations require the local administrator to notify adjacent communities and the Montana Floodplain Management Section of any proposed watercourse alterations. Notifying the local conservation district and the Department of Fish, Wildlife and Parks of proposed alterations also is advised.

AO-Zones

AO-Zones are areas subject to shallow flooding (1 to 3 feet) resulting from sheet flow conditions. Because no base flood elevation is provided for AO-Zones, NFIP regulations require that residential structures in these areas must have the lowest floor (including the basement) elevated above the highest adjacent grade, at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM). For communities regulated by the Administrative Rules of Montana, the lowest floor is required to be an additional 2 feet higher. If no depth number is indicated, a 2-foot flood protection level is required. Nonresidential structures must be elevated or floodproofed above the highest adjacent grade, to the depth number specified on the FIRM.

The highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure. Figure 10 illustrates how a structure would need to be elevated in an AO-Zone, Depth 2, in a community regulated by the minimum NFIP requirements only.

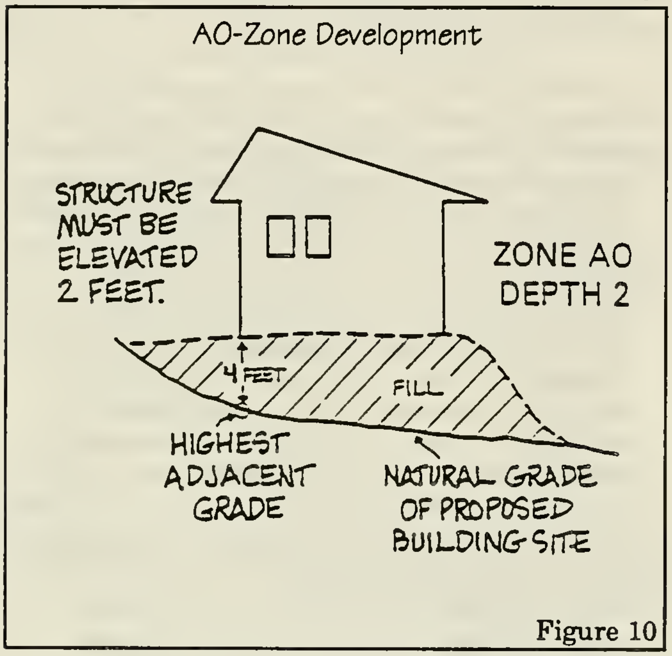

AO-Zone Development
STRUCTURE MUST BE ELEVATED 2 FEET.
ZONE AO DEPTH 2
4 FEET
FILL
HIGHEST ADJACENT GRADE
NATURAL GRADE OF PROPOSED BUILDING SITE

Figure 10

ACTING ON THE PERMIT APPLICATION

When finished reviewing a development permit application, the floodplain administrator may approve the permit as is, approve the permit with conditions, or deny the permit.

If a permit application describes a development that will be built in compliance with floodplain regulations, the local administrator may approve the application simply by marking the appropriate box on the application form, signing the application form, and providing a copy of the form to the applicant.

If the permit application describes a development that would violate the floodplain ordinance, the local administrator may approve the application with conditions if the applicant agrees to modify the proposed development. In cases where only minor modifications are needed to bring an application into compliance with the ordinance, the local administrator should work with the applicant to modify problems associated with the development.

When a permit application seriously violates the floodplain ordinance, the local administrator must deny the permit and explain to the applicant the reasons for the denial.

Applicant's Options

If an applicant's permit is denied, the following options are available:

1. The applicant may redesign the proposed development to meet the required standards.

2. If the applicant feels that the administrator is in error, the applicant may appeal the administrator's decision to the local governing body.

3. If the applicant feels that the ordinance places an undue hardship on his or her property, the applicant may request a variance to the ordinance.

VARIANCES

A variance is a waiver of one or more of the specific standards required in an ordinance. Concerning the floodplain ordinance, the general rule of thumb is: Variances should not be granted.

This statement is based on the concept that a variance represents a community's approval to set aside floodplain regulations that were adopted to reduce loss of life and property due to flood damage. Although the impact of a single variance on flood hazards may be insignificant, the cumulative impact of several variances may be severe.

If a developer requests a variance, however, the community should have a consistent and fair policy in place to deal with such requests. (The model ordinance presented in Chapter 8 addresses variances in Section 4.04.) The ordinance establishes an appeal board to act on variances. Depending on the community's specific needs, this board may be the city council, the planning and zoning commission, or an independent group.

Section 4.04 also sets guidelines for the appeal board's use during its review of variance requests. Generally, variances may be granted only if:

- good and sufficient cause is shown to do so;

- failure to grant a variance would cause the applicant an exceptional hardship;

- the variance will not cause increased flood hazards elsewhere;

- a reasonable location outside the floodplain is unavailable; and (most importantly)

- approval from DNRC's Floodplain Management Section is received before any variance is approved.

Administrative Responsibilities

In regard to variances, the NFIP regulations list two important documentation requirements.

1. Granting a variance does not decrease or waive any insurance premium rates. When a variance is granted, the local administrator must notify the applicant in writing that a project granted a variance is not exempt from insurance requirements. In some instances, a variance may cause an increase in insurance premium rates that could rise as high as $25 per $100 of coverage.

2. Any community that grants a variance must maintain records of all variance actions. These records should include the justification for granting the variance, a record of the appeal proceedings, and a copy of the written notification referred to in #1.

ENFORCEMENT

A floodplain ordinance cannot reduce the severity of flood damage unless the ordinance is properly enforced. Adequate, uniform, and fair enforcement of an ordinance stems from two requirements:

- that all new developments or substantial improvements to existing developments have a permit in place; and

- that all developments with permits be built to comply with the Montana Floodplain and Floodway Management Act and NFIP standards.

Communities need to establish procedures to ensure that these two requirements are met. For example, the best way to ensure compliance with the first requirement is the display of a permit form at the development site. This form could be printed in a bright color so that it would be easily seen, and it should be printed on durable, waterproof cardboard to withstand weather conditions during construction. When projects are being built without permits in place, local officials or area neighbors should report these incidents to local administrators.

Communities can ensure that any development actually is being built to standards by having the local administrator periodically inspect the site during construction. Any inspections of this type should be fully documented in the project file.

Communities also may consider establishing a "Certificate of Occupancy" system to prohibit anyone from occupying a new structure before an inspection is made to ensure that all community building codes — including the floodplain ordinance — have been met. Before a certificate could be issued in a flood-hazard area, a registered engineer, architect, or surveyor would have to submit a statement certifying the lowest floor or floodproofing elevation.

Violations

If the local administrator learns that a project is being developed in the floodplain without a permit in place or contrary to permitted plans, the administrator should consult the community's attorney. The two of them should try to persuade the developer to comply with the floodplain ordinance. If the developer refuses to comply, the attorney must take legal action.

Floodplain ordinance enforcement must not be easily dismissed. Communities that do not strictly maintain permit systems or those that are lax in their enforcement responsibilities are in violation of their agreements with the NFIP. The consequences of noncompliance for communities that participate in the NFIP are listed below.

Penalties for Non-Compliance with the NFIP

Communities that choose not to participate in the NFIP, or communities suspended from the NFIP for not enforcing an effective floodplain ordinance, are subject to the following consequences.

Flood insurance will not be available. No resident in the community will be able to purchase a flood insurance policy.

Federal agencies may not provide grants or loans for buildings located in identified, special flood-hazard areas of communities that do not participate in the NFIP. These agencies include the Department of Housing and Urban Development, the Small Business Administration, Farmer's Home Administration, the Economic Development Administration, and the U.S. Environmental Protection Agency.

No federal mortgage insurance may be provided in identified flood-hazard areas. This includes insurance from the Farmer's Home Administration, Veterans Administration, and Small Business Administration, along with federally supported mortgage guarantees.

No federal disaster assistance will be available for identified flood-hazard areas in nonparticipating communities in the event of a federally declared flood disaster.

Among the factors that might make a community want to reestablish eligibility in the NFIP are the following:

- a change in the governing body with new policy direction;
- the desire for a larger share of the mortgage market through Farmer's Home Administration, Veterans Administration, and Small Business Administration loans;
- the desire for a federal grant or loan for a particular project (e.g., a sewage treatment plant);
- a major disaster that triggers the need for disaster aid; or
- a change in political pressure.

RECORDKEEPING

Maintaining accurate records is an extremely important part of a community's responsibility when it participates in the NFIP. The floodplain administrator must keep the following records on file and make them available for public inspection.

1. A complete and up-to-date copy of the floodplain ordinance, the flood map (FHBM or FIRM), and the Flood Insurance Study (FIS). If the FIS has not been completed, the community should obtain the best flood-hazard data available for the area and use this information to regulate floodplain development.
2. A record of the elevation of the lowest habitable floor (including the basement) of all new or substantially improved structures in the special flood-hazard area. A record also must be kept of the elevation to which structures were floodproofed. Local administrators must require developers to complete the "Elevation Certificate" form or "Floodproofing Certificate" form (see Appendices B and C) to meet this NFIP requirement.
3. A project file for each development permit application, including:

   a. a copy of all permit applications;
   b. plans of the development (in duplicate and drawn to scale) showing
      - dimensions of the development site
      - elevations of the development site
      - proposed structures such as buildings, manufactured homes, bridges, culverts, etc. (include existing structures where appropriate)
      - placement, number, and type of anchors for manufactured homes
      - utility connection locations such as sewer, water, gas, and electric
      - bridge and culvert plans that include hydraulic computations by a registered engineer
      - fill locations and dimensions
      - storage of materials
      - drainage facilities, and
      - watercourse alterations with plan drawings, cross-sections, and hydraulic computations;
   c. copies of all pertinent correspondence related to the project;
   d. any variance or appeal proceedings;
   e. documentation of development inspections;
   f. base flood elevation data for subdivisions of 5 acres, 50 lots, or larger;
   g. certification forms for floodproofing, and certification forms indicating the lowest floor elevation of all structures; and
   h. a copy of the certificate of occupancy, where applicable.
4. A file for the biennial reports that must be submitted to the Federal Emergency Management Agency every two years. The local administrator may want to keep the following information in this file:

a. copies of previous biennial reports;
b. a running total of permits and variances granted in the flood-hazard areas;
c. maps of new annexations or other boundary changes;
d. census data; and
e. records of any major natural or man-made changes that affect flood patterns.

The biennial report will be simpler to complete if all this information is readily available and kept in one place.

LOCAL FLOODPLAIN ADMINISTRATOR

The NFIP regulations require that a community designate an official with the responsibility, authority, and means to implement the floodplain ordinance it has adopted in compliance with the NFIP. The designation of an administrator is incorporated into the text of the model ordinance shown in Chapter 8.

An administration that is fair is a major requirement for any successful permit system. To ensure this fair administration, the person selected as the administrator must have a basic knowledge of construction and must understand the NFIP. The administrator also must have the support of the local governing body.

The floodplain administrator position often is part-time, particularly in small communities. The administrator also may serve as the building inspector, zoning administrator, sanitarian, planner, or clerk. When the floodplain administrator cannot devote his or her full time to the job, the cooperation and support of other community officials and departments is especially needed to effectively implement the floodplain ordinance.

If questions or problems arise, technical assistance is available to the floodplain administrator from the state Floodplain Management Section. The address and phone number are listed on the inside front cover of this guidebook.

The local floodplain administrator's duties are summarized below.

Administration of the Floodplain Permit System

The local administrator is responsible for all aspects of the development permit process, including:

- making permit application forms available to prospective developers;
- reviewing all permits to determine whether they comply with the ordinance;
- providing base flood elevation data when FEMA has not done so, and obtaining the best available data from other sources to use in reviewing permits;
- approving, approving with conditions, or denying all permit applications;
- following up on all permits granted by conducting inspections; and
- initiating enforcement proceedings necessitated by ordinance violations.

Watercourse Alteration Notification

If a development permit application proposes a watercourse (stream, river, drainage ditch) alteration, the local administrator must notify adjacent communities and the state Floodplain Management Section of the proposed action. Such alterations also must be explained to FEMA in the biennial report.

Interpretation of Map Boundaries

When a conflict arises concerning the boundary on the flood map issued by the FIA and actual field conditions, the local administrator must interpret the flood-hazard area's exact boundaries. The local administrator does not, however, have to determine a particular structure's location on the map for flood insurance purchase requirements of lending institutions; that decision rests with the lender.

Submission of Information

Copies of permits, variances, and biennial reports must be sent to the state Floodplain Management Section.

DENIAL OF FLOOD INSURANCE

Under Section 1316 of the National Flood Insurance Act, flood insurance can be denied to properties in violation of state or local floodplain regulations. Since FEMA will not allow new flood insurance coverage for these properties, local governments should include in their floodplain regulations a statement of legal authority to file a 1316 declaration, along with an explanation of the 1316 process. A valid declaration shall consist of the following:

1. the property owner's name and address or a sufficient legal description of the property that will confirm its identity and location;
2. a clear declaration that the property is in violation of state or local laws, regulations, or ordinances;
3. a statement citing the local governing body's legal authority to file a 1316 declaration;
4. evidence that the property owner has been notified of the violation and informed that flood insurance will be denied; and
5. a statement indicating that the declaration is being submitted pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended.

Denial of flood insurance coverage may hinder efforts to obtain commercial financing for unauthorized floodplain structures.

MAP AMENDMENTS AND REVISIONS

In Montana, if a floodplain has been adopted by the Board, two redesignation processes need to be undertaken to alter a designated floodplain elevation or boundary.

The first process focuses on a Letter of Map Revision (LOMR) or a Conditional LOMR (CLOMR), which are explained below. The second process involves obtaining Board approval of the redesignation. The requirements for floodplain alterations are listed in ARM 36.15.505 (see chapter 7).

A Letter of Map Amendment (LOMA) should be requested when a parcel of property (including structures) has been included in the FIRM's statistical flood-hazard area. The LOMA mechanism is used whenever the requesting community can demonstrate that the property or structure was erroneously included in the SFHA as shown on the FIRM. The community must submit technical data to FEMA, proving that the natural property was located at or above the 100-year level, or that fill in the area had been placed there prior to the effective date.

A Letter of Map Revision (LOMR) can be obtained if property is filled above the 100-year flood level after the map's effective date. Again, technical data serves as the basis for any LOMR request sent to FEMA. When FEMA issues a LOMR, it acknowledges that the physical change in a floodplain is consistent with sound floodplain management practices. Figure 11 illustrates the LOMR process.

When considering a LOMA or LOMR, several points should be emphasized. The FIRM will not be reprinted when a LOMA or LOMR is granted. Copies of granted LOMAs and LOMRs should be kept with a community's FIRM so that changes are neither forgotten nor overlooked. Recent changes in the NFIP regulations require that fill placement for residential or commercial structures meet compaction specifications to protect the fill from scour, erosion, and settlement below the base flood elevation. Fill placement and compaction must be certified by a registered professional engineer to ensure that engineering practices have been followed to protect property against the extreme force of a 100-year flood.

The chief executive officer of a community (or the floodplain administrator) is the only official who can request a LOMA or LOMR from FEMA. All these requests should be directed to FEMA's Washington, D.C. headquarters. When FEMA grants a LOMA or LOMR, flood insurance requirements originally imposed upon a structure are not automatically canceled, although this may be a community's principal reason for requesting a LOMA or LOMR. Persons who initiate a LOMA or LOMR should check with their lending institutions to see whether the institutions will honor the LOMA or LOMR. A lending institution still may choose to require flood insurance.

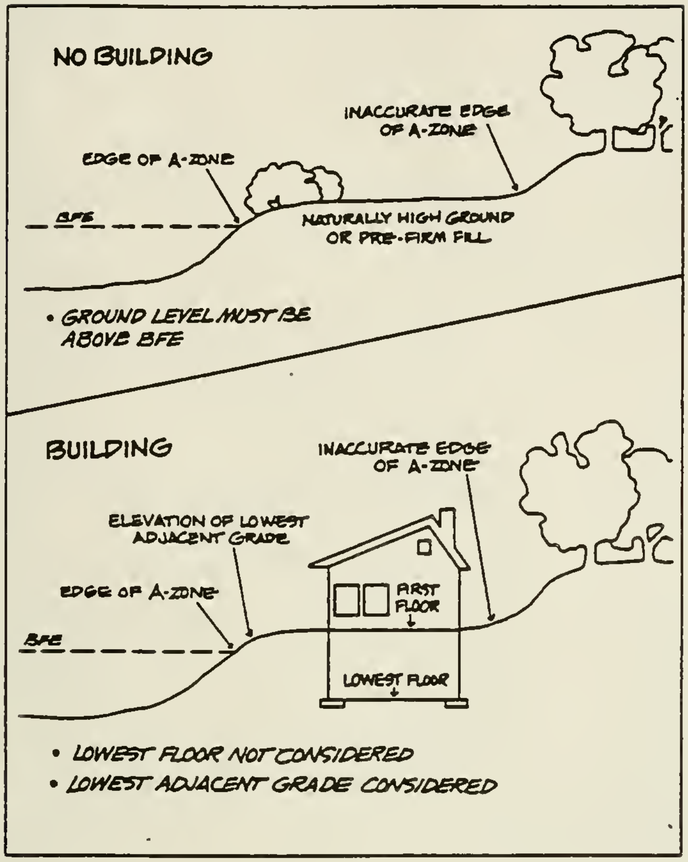
Once a LOMA or LOMR is obtained, the letter and supporting data can be submitted to DNRC with a request from the community to change the floodplain designation. DNRC will review this request and data, although final approval of the change must be granted by the Board.

For more information on either LOMAs or LOMRs, see "Appeals, Revisions, and Amendments to Flood Insurance Maps: A Guide for Community Officials" inside the back cover.

LOMA

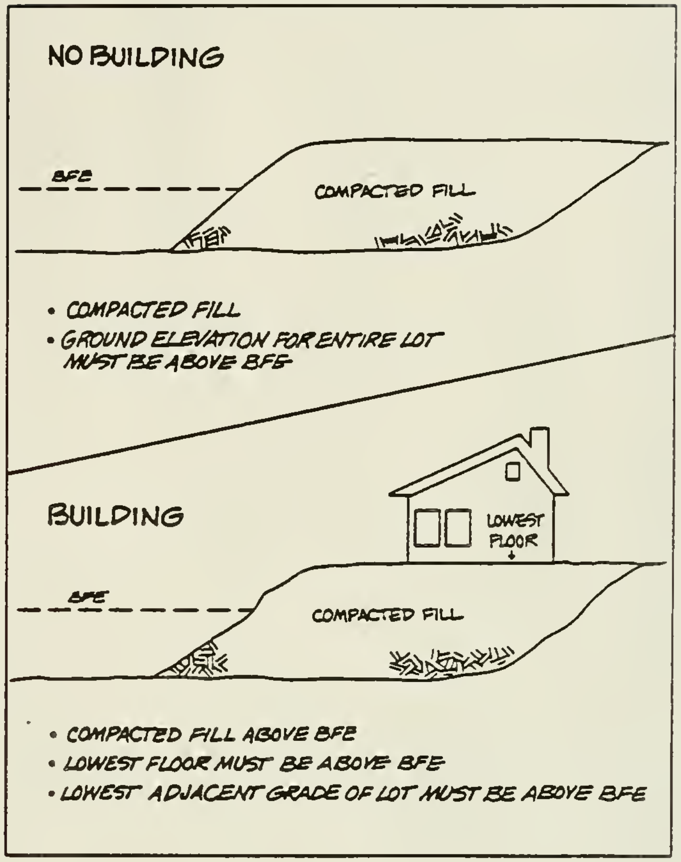
SINGLE LOT

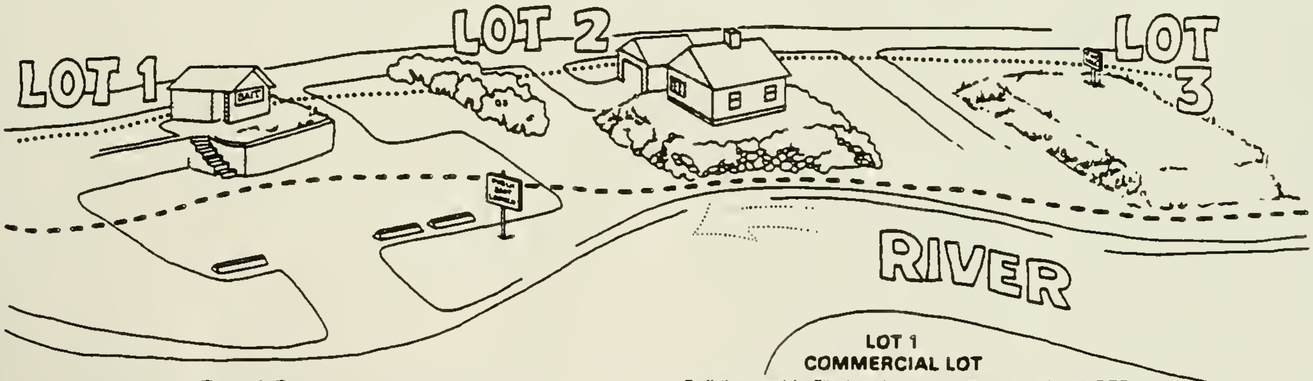
RECOGNIZING PRE-FIRM CONDITIONS


NO BUILDING
INACCURATE EDGE OF A-ZONE
EDGE OF A-ZONE
BFE
NATURALLY HIGH GROUND OR PRE-FIRM FILL
• GROUND LEVEL MUST BE ABOVE BFE
BUILDING
INACCURATE EDGE OF A-ZONE
ELEVATION OF LOWEST ADJACENT GRADE
EDGE OF A-ZONE
BFE
FIRST FLOOR
LOWEST FLOOR
• LOWEST FLOOR NOT CONSIDERED
• LOWEST ADJACENT GRADE CONSIDERED

LOMR

SINGLE LOT/POST-FIRM


NO BUILDING
BFE
COMPACTED FILL
• COMPACTED FILL
• GROUND ELEVATION FOR ENTIRE LOT MUST BE ABOVE BFE
BUILDING
LOWEST FLOOR
BFE
COMPACTED FILL
• COMPACTED FILL ABOVE BFE
• LOWEST FLOOR MUST BE ABOVE BFE
• LOWEST ADJACENT GRADE OF LOT MUST BE ABOVE BFE



LOT 1
COMMERCIAL LOT

- Building pad is filled and compacted to or above BFE.
- Compaction* certification by a registered engineer is required.
- Parking lot is allowed at existing grade below the BFE if it has no effect on the floodway.

FIGURE
LOMR EXAMPLES

······ BFE - BASE FLOOD ELEVATION or 100-YEAR FLOOD LEVEL

– – – FLOODWAY

LOT 2 – RESIDENTIAL LOT

- Residence pad is filled and compacted to or above BFE. *(NO FILL IS ALLOWED IN THE FLOODWAY.)*
- Compaction* certification by a registered engineer is required.
- Fill pad is protected with riprap.
- Detached garage is allowed below BFE, but must be dry floodproofed.

LOT 3 – VACANT LOT

- Entire lot is filled to or above BFE. *(NO FILL IS ALLOWED IN THE FLOODWAY.)*
- Compaction* certification is optional. (Certification is necessary for parts of the lot if future use is residential or commercial.)
- Fill pad must have vegetative cover.

*Compaction requirements are outlined in the October 1986 NFIP regulations.

The LOMA/LOMR Process and Examples

Figure 11

Planning to Reduce Flood Damage

CHAPTER 5

Several measures to reduce flood damage can be incorporated into a community's comprehensive plan. These measures are divided into two categories: structural and nonstructural.

STRUCTURAL MEASURES

Structural measures include various types of flood control projects that keep water physically away from certain areas. These measures are considered effective as long as they are properly designed and maintained. If a flood control structure is not properly maintained after it is built, it may fail during a flood.

Although structural flood control measures can be expensive to put into place, they provide communities with a sense of security, they can encourage floodplain development, or they can provide for continued occupation of floodprone areas. Structural methods do not provide for a comprehensive floodplain management plan, however, and only serve as a partial solution. Nonstructural methods also should be incorporated into an overall plan to reduce flood damage.

Dams and Reservoirs

Among several types of reservoirs, one type stores water when the streamflow is excessive and then releases water gradually through a controlled outlet after the flood threat has passed. Another type of reservoir, referred to as a detention basin, is a smaller impoundment that usually has uncontrolled or fixed outlets. Detention basins retain and retard flood water at a low cost, but the benefits do not extend far below the impoundment.

Levees and Floodwalls

Both levees and floodwalls are structures built to prevent flood water from overflowing onto a floodplain by confining the streamflow. Floodwalls usually are built of reinforced concrete, while levees usually are constructed of earthen materials. A false sense of security can be associated with levees and floodwalls because (1) they have a limited design life, (2) improper design could cause system failure, and (3) these structures could be overtopped by a flood larger than the design flood. Many levees hastily built during past floods do not meet current, acceptable standards for permanent flood control projects.

Channel Improvements

Various flood stages can be reduced by improved flow conditions within a channel and an increase in a stream's carrying capacity. Methods used to improve channels include:

- channel-straightening to increase the discharge rate;
- deepening or widening the channel to increase the size of the waterway;
- clearing the channel to remove brush, trees, and other obstructions; and
- lining the channel with concrete to increase efficiency.

Other structural flood-control methods, such as storage reservoirs that change water flow, also may require channel modification.

Channel modifications can cause numerous problems. For example, if not carefully designed they can cause severe erosion and bank stability problems that actually will increase flood hazards. Environmental quality impacts should be carefully weighed, since all the types of channel improvements previously discussed will damage or eliminate fish and wildlife habitat, and degrade water quality.

Watershed Treatment

Watershed treatment involves certain measures that increase infiltration, enable the soil to more capably retain excessive rainfall, and delay runoff. These measures include improving or preserving vegetative cover, regrading, or terracing. Watershed improvements will reduce erosion, maintain or improve groundwater levels, and recharge aquifers.

NONSTRUCTURAL MEASURES

Nonstructural measures focus on controlling activities that are undertaken in floodplain areas. These measures provide a community with incentives to avoid floodplain development, and they encourage the reduction of a development's vulnerability to flood damage. Nonstructural measures include floodplain regulation, zoning, building code/subdivision regulations, stormwater management, acquisition and relocation, development policy, tax incentives, floodproofing, information and education, flood forecasting and warning, and emergency preparedness. Measures not covered previously in this guidebook are discussed in this chapter.

Zoning

A community's zoning authority can be used to discourage floodplain development. For example, floodprone areas could be zoned either "agricultural," "open space," or "recreation." Generally, these types of development suffer less flood damage than residential or commercial areas. Another zoning tactic is the control of a structure's density by limiting the lot size. Zoning ordinances can prevent the expansion of nonconforming uses and could incorporate a single-loss option. This option would stipulate that a property could not be rebuilt after a flood loss of sufficient magnitude (i.e., 50 percent or more).

Building Codes/Subdivision Regulations

Generally, these codes uniformly apply to all buildings throughout a locality; certain provisions, however, are included that relate to natural hazards. Four types of construction standards have been incorporated into flood-related building codes:

1. Minimum protection elevations for the lowest floor or footings of a structure.
2. Prohibition of basements.
3. Structural reinforcement, waterproofing, or other protection requirements for structures with floors below the flood protection elevation.
4. Firmly anchored buildings required to prevent flotation during floods.

Subdivision standards that are flood-related typically require that lots be adequately elevated with proper drainage, and that public facilities be protected from flooding.

Stormwater Management

Urban development can cause increased runoff in downstream areas. Stormwater flooding problems, however, are not exclusive to floodplains. Native vegetation, croplands, wetlands, and pastures are being replaced by parking lots, streets, and buildings, and natural drainageways by storm sewers and culverts. These watershed changes can increase stormwater runoff that can cause larger and more frequent floods. A good stormwater management program is one that is designed both to reduce existing runoff problems and prevent new ones from developing. To do this, stormwater must be controlled where it falls—on site—through site-grading, vegetation areas, temporary storage, and other measures.

Acquisition and Relocation

This nonstructural approach is expensive but presents a permanent solution for areas that are frequently flooded. Tulsa, Oklahoma, for example, undertook a massive acquisition and relocation program in an area that had experienced several disastrous floods. Tulsa officials found that people were more willing to relocate soon after a flood and that public support for funding was high directly following a disaster.

Development Policy

Communities can deter floodplain development by adopting policies to prevent construction of public facilities in floodplain areas, including streets, waterlines, and sewers. Public facilities such as recreation areas or open spaces could be extended into floodprone areas, thus eliminating potential development. Both these policies can reduce flood damage potential.

Tax Incentives

Tax adjustments for land dedicated to agriculture, recreation, conservation, or other open-space uses may help preserve existing floodplains. Unless these types of concessions are made, floodprone land adjacent to communities will become more valuable each year as residential or commercial development expands. In turn, taxes on all adjacent open land could increase to the point that the land no longer could be used profitably for farming or other open uses.

Information and Education

An effective information and education program is a prerequisite for any successful, flood-hazard mitigation plan. With this type of plan in place, local residents who are knowledgeable about flooding and flood hazards will more likely make wise decisions to protect themselves and their property from flood damage.

A community should use an ongoing public awareness campaign about flooding to increase and reinforce public knowledge of flood hazards. Public media such as radio, television, and newspapers should be used to convey this message to the public. Floodplain officials could make presentations to civic organizations or church groups to solicit help with disseminating information. Also, educational materials on flooding and floodplain management could be made available for public schools to include in their curricula. Information could be included in consumers' utility bills, tax statements, and newspapers or printed on grocery bags. Warning signs could be posted on public rights-of-way to warn potential property buyers of flood hazards or indicate the high water marks of past floods.

Flood Forecasting and Warning

Reliable and accurate forecasts and flood warnings, coupled with timely evacuations, would save lives and reduce property losses. Although the federal government (through the National Weather Service) generally is responsible for predicting disasters, the local government must ensure that the public is warned of a disaster in sufficient time to take protective action. Well-organized systems that will effectively disseminate flood-warning information must be established by communities in cooperation with the County Disaster and Emergency Services coordinator.

Emergency Preparedness

When a flood appears imminent, a community can take numerous actions to reduce or prevent damage. An effective emergency operation plan ready to be implemented is the most important step. Emergency flood fighting can involve a number of activities, including evacuation of floodplain residents, installation of temporary pumping stations for interior drainage behind levees, and sandbag closures for openings in levees or low areas. A well-coordinated flood fight requires a sophisticated flood response and recovery plan that defines the responsibilities of various departments within a local government unit, along with the support of various federal, state, and private agencies. Equipment and materials required for a flood fight must be stockpiled in the community at a location immediately accessible to the community.

Post-flood Recovery Opportunities

After a flood, emphasis is placed on returning a community to its pre-flood condition. During this time, communities should approach repairs and reconstruction with caution. Ideally, this is the best time to look for ways to reduce future flood damage. For example, if a school or other public facility was flood-damaged, now would be a good time to install floodproofing devices rather than rebuilding the structure as it was before the flood. Relocating severely damaged structures to flood-free locations also is an approach that should be considered directly after a flood.

Community Rating System Summary

CHAPTER 6

Since 1968, the NFIP has provided federally backed flood insurance to encourage communities to enact and enforce floodplain regulations. This program has proven successful in helping flood victims, with more than 2.2 million policies in force nationwide. Since 1978, 350,000 insurance claims totaling $2.5 billion have been paid. In Montana, approximately 1,500 policies are in force; since 1978, 750 insurance claims totaling $2 million have been paid.

To be covered by a flood insurance policy, a property must be located in a community that participates in the NFIP. To qualify, a community must adopt and enforce a floodplain management ordinance to regulate proposed development in flood-hazard areas. This ordinance ensures that any development will not aggravate existing flood conditions and that new buildings will be protected from future flood damage. To date, nearly 18,000 U.S. communities participate in the NFIP.

The NFIP has succeeded in requiring that new buildings be protected from damage by the 100-year flood. In the past, however, the program provided few incentives for communities other than the enforcement of minimum regulatory standards. Flood insurance rates were the same in all participating communities, even though some communities did much more than regulate construction of new buildings to meet national standards.

Until now, the NFIP did little to recognize or encourage community activities to reduce flood damage to existing buildings, to manage development in areas not mapped by the NFIP, to protect new buildings beyond the minimum NFIP protection level, to help insurance agents obtain flood data, or to help people obtain flood insurance. Because these activities can greatly affect the insurance premium base, flood damage, flood insurance claims, and federal disaster assistance payments, the Federal Insurance Administration (FIA) implemented the Community Rating System (CRS).

THE CONCEPT

Since the turn of the century, experience has shown that the fire insurance public protection class given to a community has served as a strong incentive for local officials to maintain or improve their fire protection programs. To maintain favorable fire insurance rate classes for their communities, local governing boards ensure that their fire alarm communications, water supply and distribution, and overall fire department facilities — including staffing, equipment, training — meet or exceed the insurance industry's minimum criteria.

In March 1987, the Federal Insurance Administrator established the Community Rating Task Force comprised of FIA members, insurance company representatives, and state and local floodplain managers. The task force established three goals for the CRS:

> [To] encourage, by the use of flood insurance premium adjustments, community and state activities beyond those required by the National Flood Insurance Program to:
>
> - reduce flood losses,
> - facilitate accurate insurance rating, and
> - promote the awareness of flood insurance.

The task force worked with the Association of State Floodplain Managers (ASFPM) and ISO/Commercial Risk Services, Inc. (ISO) to develop a rating schedule and administrative procedures. The ISO is a non-profit corporation with more than 1,300 insurance company subscribers. Among its services, ISO develops and provides advisory fire insurance classification of community fire protection programs.

The CRS is the end product of three years of development, field-testing, and critiques and review with communities, public interest organizations, and the ASFPM's technical advisors. Although the work has been reviewed by 400 professional floodplain managers, 50 public interest organizations, and 41 communities, the CRS continues to be subject to change and improvement as more experience is gained through its administration, as information is gathered, and as more is learned about effective floodplain management techniques.

COMMUNITY CLASSIFICATION

Flood insurance premium credits are available in communities based on their CRS classifications. Ten classes are used, with Class 1 having the greatest premium credit and Class 10 having no premium credit. A community's CRS class is based on the number of credit points calculated for activities undertaken to reduce flood losses, facilitate accurate insurance ratings, and promote flood insurance awareness.

A community automatically is granted a Class 10 rating unless it applies a for CRS classification and shows that activities being implemented in its area warrant a better class rating. The amount of premium credit for each class is published annually by the FIA.

The CRS rewards communities that go beyond the NFIP's minimum requirements to help residents prevent or reduce flood losses. The system also should provide an incentive for communities to begin new flood protection activities.

OPERATION

A community's application for a CRS classification is voluntary, and any community that fully complies with the NFIP's rules and regulations may apply. The applicant community must submit documentation showing that it is implementing one or more of the activities recognized in the CRS schedule.

This schedule identifies 18 creditable activities organized under four categories in Sections 300-600: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness. (See "Activities Credited under the CRS" on this page.) The CRS schedule assigns credit points to an applicant based on how well an activity affects the CRS's goals. Communities are welcome to propose alternate approaches in their applications.

Some of the activities may be implemented by the state or a regional district rather than at the local level. For example, some states have disclosure laws that may meet the credit criteria of Activity 340-Flood Hazard Disclosure. In such cases, any community in those states or districts could receive credit points if that community applies for a CRS classification, and if the state or district program is in fact being implemented in the community.

The Federal Emergency Management Agency's regional office and the state NFIP coordinator are responsible for reviewing and commenting on a community's application. The FIA verifies both the information and a community's implementation of the activities. The FIA also sets the credit to be granted and notifies the community, the state, the insurance companies, and any other appropriate parties of this credit.

A community's activities and performances are reviewed periodically. If the community is not properly or fully implementing the credited activities, its credit points and — possibly — its CRS classification will be revised. A community may add or drop creditable activities each year, and credit criteria for each activity also may change as more experience is gained through implementing, observing, and measuring the activities.

COSTS AND BENEFITS

No fee is required for a community to apply for CRS classification or to participate in the CRS. Because of the cost to implement creditable activities, however, some communities may be concerned whether the flood insurance premium credits will offset the cost of initiating a new activity.

Important to note is that a reduction in flood insurance rates is only one of the rewards to communities that undertake activities credited under the CRS. Other rewards include increased public safety, reduced damage to property and public infrastructure, avoidance of economic disruption and losses, reduced human suffering, and protection of the environment.

Communities should prepare and implement activities that will most effectively deal with a local flood problem, not just the items listed in the schedule. When communities consider whether to undertake a new activity, they will want to consider all the benefits to be provided by the activity (in addition to insurance premium credits) in order to determine whether it is cost-effective.

ACTIVITIES CREDITED UNDER THE CRS

[Sections 100 and 200 cover other topics in the CRS schedule]

300 Public Information Activities

310 Elevation Certificate: Maintain FEMA's Elevation Certificate and make copies available to inquirers.

320 Map Determinations: Respond to inquiries for Flood Insurance Rate Map zone and flood data.

330 Outreach Projects: Advise residents about flood hazard, flood insurance, and flood protection measures.

340 Hazard Disclosure: Advise potential purchasers of floodprone property about the hazard.

350 Flood Protection Library: Maintain and publicize a library or references on flood insurance and flood protection.

360 Flood Protection Assistance: Provide direct advice to property owners desiring to protect themselves from flooding.

400 Mapping and Regulatory Activities

410 Additional Flood Data: Develop new flood elevations, floodway delineations, wave heights, or other regulatory flood-hazard data.

420 Open Space Preservation: Credit is provided according to the amount of vacant floodplain kept free from buildings and filling.

430 Higher Regulatory Standards: Regulations that require new development to be protected to a level greater than that under the NFIP rules.

440 Flood Data Maintenance: Make the community's floodplain maps more current, useful, or accurate.

450 Stormwater Management: Regulate new development throughout the watershed to minimize impact on surface drainage and runoff.

500 Flood Damage Reduction Activities

510 Repetitive Loss Projects: Develop and implement a plan to mitigate losses in frequently flooded areas.

520 Acquisition and Relocation: Purchase or relocate buildings and convert floodprone properties to open space.

530 Retrofitting: Credit is provided according to how buildings have been retrofitted to protect them from flood damage.

540 Drainage System Maintenance: Conduct periodic inspections and maintain the capacities of the channels and retention basins.

600 Flood Preparedness Activities

610 Flood Warning Program: Provide early flood warnings to the general public and special facilities.

620 Levee Safety: Maintain levees that are not credited with providing base flood protection and develop emergency response plans for them.

630 Dam Safety: All communities in a state with an approved dam safety program receive credit.

FIRST-YEAR APPLICANT RESULTS

During 1991, Montana's first year of application, eight communities received a Class 9 rating. The premium credit became effective October 1, 1991, providing a substantial savings for those eight communities. The results are shown in the following table.

Community	Total $ Premium	x .05 Credit	Total Savings
Belt	$ 8,795	.05	$ 439.75
Cascade County	45,163	.05	2,258.15
Circle	267	.05	13.35
Great Falls	47,698	.05	2,384.90
Lewis & Clark County	8,654	.05	432.70
Miles City	35,866	.05	1,793.30
Missoula	14,582	.05	729.10
Missoula County	17,582	.05	879.10
Totals	**$178,607**	**.05**	**$8,930.35**

The efforts of these communities saved the public nearly $8,950 during the first year alone. Those communities that were able to receive a class 8 or better rating will save even more money when their higher rating classifications become effective in 1992.

Communities interested in applying for the CRS should contact the Floodplain Management Section's Supervisor Karl Christians at 444-6654 for assistance.

Floodplain Laws, Rules, and Regulations

CHAPTER 7

CHAPTER 5

FLOODPLAIN AND FLOODWAY MANAGEMENT

Part 1 — General Provisions

76-5-101. Findings.
76-5-102. Policy and purposes.
76-5-103. Definitions.
76-5-104. Presumption that depression is watercourse.
76-5-105. Authority to enter and investigate lands or waters.
76-5-106. Exemption for small drainage area.
76-5-107. Federal supremacy.
76-5-108. Permit construed as added requirement.
76-5-109. Other legal remedies preserved — immunity.
76-5-110. Penalties for violation.

Part 2 — Role of State Agencies

76-5-201. Program for delineation of floodplains and floodways.
76-5-202. Designation of floodplains and floodways.
76-5-203. Alteration of floodplains or floodways.
76-5-204. What constitutes notice.
76-5-205. Furnishing of material to local governments.
76-5-206. Powers and duties of department relative to obstructions.
76-5-207. Floodway obstruction removal fund.
76-5-208. Orders and rules.
76-5-209. Appeal from board order.

Part 3 — Role of Local Government

76-5-301. Land use regulations.
76-5-302. Substitution of local control for state permit system.

Part 4 — Use of Floodplains and Floodways

76-5-401. Permissible open-space uses.
76-5-402. Permissible uses within floodplain but outside of floodway.
76-5-403. Prohibited uses within floodway.
76-5-404. Artificial obstructions and nonconforming uses.
76-5-405. Variance for obstruction or nonconforming use.
76-5-406. Criteria to be considered in connection with variance request.

Parts 5 through 10 reserved

Part 11 — Water Conservation and Flood Control Projects

76-5-1101. Water conservation and flood control projects authorized.
76-5-1102. Types of projects.
76-5-1103. Water conservation and flood control activities declared public purpose.
76-5-1104. Construction of part.
76-5-1105. Division of work into parts.
76-5-1106. Requirements to change project boundaries.
76-5-1107. Direction and construction responsibility of state or federal government — local role.
76-5-1108. Acquisition of property.
76-5-1109. Contracts for use of railroads and highways.
76-5-1110. Cooperation with governmental, public, and private agencies.
76-5-1111. Apportionment of costs.
76-5-1112. Sources of funds for cost of acquiring right-of-way and other costs.
76-5-1113. Special assessments for operation and maintenance authorized.
76-5-1114. Determination of assessment.
76-5-1115. Fees and charges authorized.
76-5-1116. Determination of fees and charges.
76-5-1117. Bonds authorized — procedure.

Chapter Cross-References

Water rights, Art. IX, sec. 3, Mont. Const.
Flood control by water and sewer districts, 7-13-2218.
Flood Control Act of 1954 — distribution of revenues to counties, 17-3-231, 17-3-232.
Easements relating to flooding, 70-17-101.
Application of the Natural Streambed and Land Preservation Act of 1975, 75-7-105.
Water development program — flood control, 85-1-602.
Flood control by conservancy districts, 85-9-102.

Part 1
General Provisions

76-5-101. Findings.

The people of the state of Montana find that:

(1) recurrent flooding of a portion of the state's land resources causes loss of life, damage to

property, disruption of commerce and governmental services, and unsanitary conditions; all of which are detrimental to the health, safety, welfare, and property of the occupants of flooded lands and the people of this state; and
(2) the public interest necessitates management and regulation of flood-prone lands and waters in a manner consistent with sound land and water use management practices which will prevent and alleviate flooding threats to life and health and reduce private and public economic losses.
History: En. Sec. 1, Ch. 393, L. 1971; R.C.M. 1947, 89-3501.

76-5-102. Policy and purposes.
(1) The policy and purposes of parts 1 through 4 of this chapter are to:
(a) guide development of the floodway areas of this state consistent with the enumerated findings;
(b) recognize the right and need of watercourses to periodically carry more than the normal flow of water;
(c) provide state coordination and technical assistance to local units in management of floodway areas;
(d) coordinate federal, state, and local management activities for floodway areas;
(e) encourage local governmental units to manage flood-prone lands, including the adoption, enforcement, and administration of land use regulations; and
(f) provide the department of natural resources and conservation with authority necessary to carry out a comprehensive floodway management program for the state.
(2) Specifically, it is the purpose of parts 1 through 4 to:
(a) restrict or prohibit uses which are dangerous to health or safety of property in times of flood or cause increased flood heights or velocities;
(b) require that uses vulnerable to floods, including public facilities which serve such uses, be provided with flood protection at the time of initial construction;
(c) develop and provide information to identify lands which are unsuited for certain development purposes because of flood hazard;
(d) distinguish between the land use regulations applied to the designated floodway and those applied to that portion of the designated floodplain not contained within the designated floodway;
(e) apply more restrictive land use regulations within the designated floodway;
(f) ensure that regulations and minimum standards adopted under parts 1 through 4, insofar as possible, balance the greatest public good with the least private injury.
History: En. Sec. 2, Ch. 393, L. 1971; amd. Sec. 194, Ch. 253, L. 1974; amd. Sec. 1, Ch. 271, L. 1974; R.C.M. 1947, 89-3502.

76-5-103. Definitions.
As used in parts 1 through 4 of this chapter, unless the context otherwise requires, the following definitions apply:
(1) "Artificial obstruction" means any obstruction which is not a natural obstruction and includes any dam, wall, riprap, embankment, levee, dike, pile, abutment, projection, revetment, excavation, channel rectification, bridge, conduit, culvert, building, refuse, automobile body, fill, or other analogous structure or matter in, along, across, or projecting into any floodplain or floodway which may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by the water, or that is placed where the natural flow of the water would carry the same downstream to the damage or detriment of either life or property.
(2) "Board" means the board of natural resources and conservation provided for in 2-15-3302.
(3) "Channel" means the geographical area within either the natural or artificial banks of a watercourse or drainway.
(4) "Department" means the department of natural resources and conservation provided for in Title 2, chapter 15, part 33.
(5) "Designated floodplain" means a floodplain whose limits have been designated and established by order of the board.
(6) "Designated floodway" means a floodway whose limits have been designated and established by order of the board.
(7) "Drainway" means any depression 2 feet or more below the surrounding land serving to give direction to a current of water less than 9 months of the year and having a bed and well-defined banks.
(8) "Establish" means construct, place, insert, or excavate.
(9) "Flood" means the water of any watercourse or drainway which is above the bank or outside the channel and banks of such watercourse or drainway.

(10) "Flood of 100-year frequency" means a flood magnitude expected to recur on the average of once every 100 years or a flood magnitude which has a 1% chance of occurring in any given year.

(11) "Floodplain" means the area adjoining the watercourse or drainway which would be covered by the flood water of a flood of 100-year frequency, except for sheetflood areas that receive less than 1 foot of water per occurrence and are considered "zone B" by the federal emergency management agency.

(12) "Floodway" means the channel of a watercourse or drainway and those portions of the floodplain adjoining the channel which are reasonably required to carry and discharge the flood water of any watercourse or drainway.

(13) "Natural obstruction" means any rock, tree, gravel, or analogous natural matter that is an obstruction and has been located within the floodplain or floodway by a nonhuman cause.

(14) "Owner" means any person who has dominion over, control of, or title to an obstruction.

(15) "Political subdivision" means any incorporated city or town or any county organized and having authority to adopt and enforce land use regulations.

(16) "Responsible political subdivision" means a political subdivision that has enacted land use regulations in accordance with parts 1 through 4.

(17) "Watercourse" means any depression 2 feet or more below the surrounding land serving to give direction to a current of water at least 9 months of the year and having a bed and well-defined banks; provided that it shall, upon order of the board, also include any particular depression which would not otherwise be within the definition of watercourse.

History: En. Sec. 3, Ch. 393, L. 1971; amd. Sec. 1, Ch. 294, L. 1973; amd. Sec. 195, Ch. 253, L. 1974; amd. Sec. 2, Ch. 271, L. 1974; R.C.M. 1947, 89-3503(part); amd. Sec. 1, Ch. 428, L. 1981.

76-5-104. Presumption that depression is watercourse.

In the event of doubt as to whether a depression is a watercourse or drainway, it shall be presumed to be a watercourse.

History: En. Sec. 3, Ch. 393, L. 1971; amd. Sec. 1, Ch. 294, L. 1973; amd. Sec. 195, Ch. 253, L. 1974; amd. Sec. 2, Ch. 271, L. 1974; R.C.M. 1947, 89-3503(part).

76-5-105. Authority to enter and investigate lands or waters.

(1) The department or the responsible political subdivision may make reasonable entry upon any lands and waters in the state for the purpose of making an investigation, survey, removal, or repair contemplated by parts 1 through 4 of this chapter. Unless written consent is obtained, however, the department or the responsible political subdivision shall provide written notice of its entry by personal delivery to the owner, owner's agent, lessee, or lessee's agent whose lands will be entered. If none of these persons can be found, the department or the responsible political subdivision shall affix a copy of the notice to one or more conspicuous places on the property.

(2) An investigation of a natural or artificial obstruction or nonconforming use shall be made by the department or the responsible political subdivision either on its own initiative, on the written request of three titleholders of land abutting the watercourse or drainway involved, or on the written request of a political subdivision. Upon the request of an owner, owner's agent, lessee, or lessee's agent whose lands will be entered to undertake the investigation, the department or the responsible political subdivision shall release the names and addresses of the persons or political subdivision requesting the investigation.

History: En. Sec. 9, Ch. 393, L. 1971; amd. Sec. 201, Ch. 253, L. 1974; amd. Sec. 8, Ch. 271, L. 1974; R.C.M. 1947, 89-3509; amd. Sec. 1, Ch. 382, L. 1985.

76-5-106. Exemption for small drainage area.

Parts 1 through 4 of this chapter shall not extend to any obstruction in the floodplain or floodway of a watercourse or drainway where the drainage area above the same, either within or without the state, is less than 25 square miles in extent unless a particular watercourse or drainway is expressly declared to be within the coverage of parts 1 through 4 by order of the board.

History: En. Sec. 10, Ch. 393, L. 1971; amd. Sec. 9, Ch. 271, L. 1974; R.C.M. 1947, 89-3510.

76-5-107. Federal supremacy.

Parts 1 through 4 do not interfere with the right of the United States to regulate interstate commerce or the navigable waters of the United States.

History: En. Sec. 14, Ch. 393, L. 1971; amd. Sec. 204, Ch. 253, L. 1974; amd. Sec. 11, Ch. 271, L. 1974; amd. Sec. 4, Ch. 73, L. 1977; R.C.M. 1947, 89-3514(part).

76-5-108. Permit construed as added requirement.

The granting of a permit under parts 1 through 4 of this chapter does not affect any other type of approval required by any other statute or ordinance of the state, of any political subdivision, or of the United States but is an added requirement.

History: En. Sec. 14, Ch. 393, L. 1971; amd. Sec. 204, Ch. 253, L. 1974; amd. Sec. 11, Ch. 271, L. 1974; amd. Sec. 4, Ch. 73, L. 1977; R.C.M. 1947, 89-3514(part).

76-5-109. Other legal remedies preserved — immunity.

(1) The grant or denial of a permit does not have an effect on a remedy of a person at law or in equity.

(2) Where it is shown that there is a wrongful failure to comply with parts 1 through 4 of this chapter, there is a rebuttable presumption that the obstruction was the proximate cause of the flooding of the land of a person bringing suit.

(3) The use of any one of the remedies or powers given to the board or the department in parts 1 through 4 is not a bar to the exercise of any other remedy or power given by parts 1 through 4.

(4) An action for damages sustained because of injury caused by an obstruction for which a permit has been granted under parts 1 through 4 may not be brought against the state, the board, a member of the board, or the department.

History: (1), (2), (4)En. Sec. 14, Ch. 393, L. 1971; amd. Sec. 204, Ch. 253, L. 1974; amd. Sec. 11, Ch. 271, L. 1974; amd. Sec. 4, Ch. 73, L. 1977; Sec. 89-3514, R.C.M. 1947; (3)En. Sec. 15, Ch. 393, L. 1971; amd. Sec. 205, Ch. 253, L. 1974; Sec. 89-3515, R.C.M. 1947; R.C.M. 1947, 89-3514(part), 89-3515.

76-5-110. Penalties for violation.

Any person who violates 76-5-401 through 76-5-404 shall be guilty of a misdemeanor and shall upon conviction thereof be fined not more than $100 or be imprisoned in the county jail for not more than 10 days or be both so fined and imprisoned. Each day's continuance of a violation shall be deemed a separate and distinct offense.

History: En. Sec. 13, Ch. 393, L. 1971; R.C.M. 1947, 89-3513.

Part 2
Role of State Agencies

76-5-201. Program for delineation of floodplains and floodways.

(1) The department shall initiate a comprehensive program for the delineation of designated floodplains and designated floodways for every watercourse and drainway in the state. It shall make a study relating to the acquiring of flood data and may enter into arrangements with the United States geological survey, the United States army corps of engineers, or any other state or federal agency for such acquisition.

(2) Before the board establishes by order a designated floodplain or a designated floodway, the department shall consult with the affected political subdivisions. Consultation shall include but not be limited to the following:

(a) specifically requesting that the political subdivisions submit pertinent data concerning flood hazards, including flooding experiences, plans to avoid potential hazards, estimates of economic impacts of flooding on the community, both historical and prospective, and such other data as considered appropriate;

(b) notifying local officials, including members of the county commission, city council, and planning board, of the progress of surveys, studies, and investigations and of proposed findings, along with information concerning data and methods employed in reaching such conclusions; and

(c) encouraging local dissemination of information concerning surveys, studies, and investigations so that interested persons will have an opportunity to bring relevant data to the attention of the department.

History: En. Sec. 4, Ch. 393, L. 1971; amd. Sec. 2, Ch. 294, L. 1973; amd. Sec. 196, Ch. 253, L. 1974; amd. Sec. 3, Ch. 271, L. 1974; amd. Sec. 1, Ch. 262, L. 1977; R.C.M. 1947, 89-3504(1).

76-5-202. Designation of floodplains and floodways.

(1) When sufficient data has been acquired by the department, the board shall establish, by order after a public hearing, the designated floodplain within which a political subdivision may establish land use regulation.

(2) When sufficient data has been acquired, the board shall establish, by order after a public

hearing, the designated floodway within which a political subdivision may establish land use regulation.

(3) These designations shall be based upon reasonable hydrological certainty. Designations made according to a flood hazard boundary map prepared by the federal emergency management agency have a rebuttable presumption of reasonable hydrological certainty.

(4) The department shall record all designated floodplains or designated floodways established by the board in the office of the county clerk and recorder of each county in which those floodplains or floodways are found.

History: En. Sec. 4, Ch. 393, L. 1971; amd. Sec. 2, Ch. 294, L. 1973; amd. Sec. 196, Ch. 253, L. 1974; amd. Sec. 3, Ch. 271, L. 1974; amd. Sec. 1, Ch. 262, L. 1977; R.C.M. 1947, 89-3504(part); amd. Sec. 1, Ch. 160, L. 1987.

76-5-203. Alteration of floodplains or floodways.

The board may alter the floodplains or floodways at any later time, by order after a public hearing, if a reevaluation of the then available flood data warrants it.

History: En. Sec. 4, Ch. 393, L. 1971; amd. Sec. 2, Ch. 294, L. 1973; amd. Sec. 196, Ch. 253, L. 1974; amd. Sec. 3, Ch. 271, L. 1974; amd. Sec. 1, Ch. 262, L. 1977; R.C.M. 1947, 89-3504(part).

76-5-204. What constitutes notice.

Notice of a hearing or order of the board establishing or altering the floodplains or floodways shall be given by publishing the notice once each week for 3 consecutive weeks in a legal newspaper published or of general circulation in the area involved, the last publication of which shall be not less than 10 days prior to the date set for the hearing or the effective date of the order.

History: En. Sec. 4, Ch. 393, L. 1971; amd. Sec. 2, Ch. 294, L. 1973; amd. Sec. 196, Ch. 253, L. 1974; amd. Sec. 3, Ch. 271, L. 1974; amd. Sec. 1, Ch. 262, L. 1977; R.C.M. 1947, 89-3504(part).

76-5-205. Furnishing of material to local governments.

(1) When the designated floodplain or the designated floodway has been established, the department shall furnish this data to officials of the political subdivision having jurisdiction over those areas, together with a map outlining the areas involved, a copy of parts 1 through 4 of this chapter, adopted rules of the board, and suggested minimum standards adopted by the board.

(2) These standards and rules shall reflect gradations in flood hazard based on criteria as outlined in 76-5-406. In adopting these standards and rules, the board shall consider local input from the affected political subdivisions.

History: En. Sec. 4, Ch. 393, L. 1971; amd. Sec. 2, Ch. 294, L. 1973; amd. Sec. 196, Ch. 253, L. 1974; amd. Sec. 3, Ch. 271, L. 1974; amd. Sec. 1, Ch. 262, L. 1977; R.C.M. 1947, 89-3504(part).

76-5-206. Powers and duties of department relative to obstructions.

(1) Where an obstruction to a designated floodway established under 76-5-202 through 76-5-205 has been created by fallen trees, silt, debris, wreckage, unanchored automobile bodies, and like matter, the department may, in its discretion, remove the obstruction, in which case the cost of removal shall be borne by the department.

(2) Where, after investigation, notice, and hearing, an order has been issued by the board to the owner of an obstruction not exempt under 76-5-401 through 76-5-404 for its removal or repair and the order is not complied with within such reasonable time as may be prescribed or if the owner cannot be found or determined, the department may make or cause the removal or repairs to be made, the cost of which shall be borne by the owner and shall be recoverable in the same manner as debts are now recoverable by law.

History: En. Sec. 8, Ch. 393, L. 1971; amd. Sec. 5, Ch. 294, L. 1973; amd. Sec. 200, Ch. 253, L. 974; amd. Sec. 7, Ch. 271, L. 1974; R.C.M. 1947, 89-3508.

76-5-207. Floodway obstruction removal fund.

The state treasurer shall establish the floodway obstruction removal fund and credit to the fund for the removal of obstructions as provided in 76-5-206(1) such money specifically appropriated by the legislature. The department may allocate money from the floodway obstruction removal fund for purposes provided in 76-5-206(1).

History: En. Sec. 12, Ch. 393, L. 1971; amd. Sec. 203, Ch. 253, L. 1974; R.C.M. 1947, 89-3512.

76-5-208. Orders and rules.

(1) The board may adopt such orders and rules as are necessary to implement parts 1 through 4

of this chapter. All orders and rules adopted by the board shall be on file at the offices of the department and in the office of the county clerk and recorder of each county affected by the order or rule.

(2) If an order is issued to the owner of an artificial obstruction or nonconforming use not exempt under 76-5-401 through 76-5-404 for its removal or repair, the order shall not become effective less than 10 days after a hearing is held relating to the order.

(3) In addition to any requirement imposed by 76-5-202 through 76-5-205, where an order is issued which affects with particularity the land adjacent to a watercourse or drainway, notice of the contents of the order and of any required hearing shall be mailed by the department to the titleholder of the land not less than 10 days before the effective date of the order or, if there is a required hearing, to the titleholder of the land and to the owner of the artificial obstruction or nonconforming use not less than 10 days before the date of the hearing. However, the notice need not be given to the owner of the artificial obstruction or nonconforming use for an order issued pursuant to 76-5-206(2) if the owner cannot be found or determined.

History: En. Sec. 11, Ch. 393, L. 1971; amd. Sec. 202, Ch. 253, L. 1974; amd. Sec. 10, Ch. 271, L. 1974; R.C.M. 1947, 89-3511(part).

Cross-References

Adoption and publication of rules under Montana Administrative Procedure Act, Title 2, ch. 4, part 3.

76-5-209. Appeal from board order. (1) A person aggrieved by any order of the board issued under parts 1 through 4 of this chapter may appeal from the order to a court of competent jurisdiction within 30 days after its effective date. Service of notice of the appeal shall be made upon the department.

(2) If an appeal is taken, enforcement of the order shall be stayed pending the outcome of the appeal.

History: En. Sec. 11, Ch. 393, L. 1971; amd. Sec. 202, Ch. 253, L. 1974; amd. Sec. 10, Ch. 271, L. 1974; R.C.M. 1947, 89-3511(part).

Cross-References

Contested cases under Montana Administrative Procedure Act, Title 2, ch. 4, part 6.

Part 3
Role of Local Government

Part Cross-References

Flood Control Act of 1954 — distribution of revenue to counties, 17-3-231, 17-3-232.

76-5-301. Land use regulations. (1) Upon transmittal of the floodplain information to officials of a political subdivision, the political subdivision has 6 months from the date of transmittal to adopt land use regulations which meet or exceed the minimum standards of the board. Such regulations may include, for the purposes of floodplain management only, floodplain management regulations within sheetflood areas as determined by the federal emergency management agency.

(2) If within the 6-month period the political subdivision has failed to adopt the land use regulations, the department shall enforce the minimum standards within the designated floodplain or the designated floodway as established by the board under 76-5-202 through 76-5-205, and no artificial obstruction or nonconforming use may be established by any person within the designated floodplain or the designated floodway unless specifically authorized by the board.

(3) A political subdivision which has failed to adopt land use regulations which meet or exceed the minimum standards of the board within the 6-month period may subsequently adopt such regulations, and if approved by the board, they shall be effective within the designated floodplain or floodway and administered and enforced by the political subdivision.

(4) When necessary for compliance with federal flood insurance requirements, the board may shorten the 6-month period upon notification to the political subdivision and publication of a notice thereof in a newspaper of general circulation in the affected area once a week for 3 consecutive weeks.

History: En. Sec. 4, Ch. 393, L. 1971; amd. Sec. 2, Ch. 294, L. 1973; amd. Sec. 196, Ch. 253, L. 1974; amd. Sec. 3, Ch. 271, L. 1974; amd. Sec. 1, Ch. 262, L. 1977; R.C.M. 1947, 89-3504(3) thru (5); amd. Sec. 1, Ch. 74, L. 1983.

Cross-References

Master plan notation of flood control measures, 76-1-601.

76-5-302. Substitution of local control for state permit system.

(1) If a political subdivision enacts, in harmony with the purposes of parts 1 through 4 of this chapter, permit issuance ordinances, regulations, or resolutions and land use ordinances, regulations, or resolutions which meet or exceed the minimum standards of the board and if the administrative and enforcement procedures established for those ordinances, regulations, or resolutions are found acceptable by the board, no permit from the department is required.

(2) However, if the board determines that there is a failure by a political subdivision to comply with the intent, purposes, and provisions of parts 1 through 4 and the minimum standards adopted thereunder, the powers of the political subdivision may be suspended after hearing and the minimum standards adopted by the board shall be enforced by the department until such time as the board determines that the political subdivision will comply.

History: En. Sec. 14, Ch. 393, L. 1971; amd. Sec. 204, Ch. 253, L. 1974; amd. Sec. 11, Ch. 271, L. 1974; amd. Sec. 4, Ch. 73, L. 1977; R.C.M. 1947, 89-3514(part).

Part 4
Use of Floodplains and Floodways

Part Cross-References

Easements relating to flooding, 70-17-101.

76-5-401. Permissible open-space uses. The following open-space uses shall be permitted within the designated floodway to the extent that they are not prohibited by any other ordinance or statute and provided they do not require structures other than portable structures, fill, or permanent storage of materials or equipment:

(1) agricultural uses;

(2) industrial-commercial uses such as loading areas, parking areas, or emergency landing strips;

(3) private and public recreational uses such as golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife management and natural areas, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, or hiking and horseback riding trails;

(4) forestry, including processing of forest products with portable equipment;

(5) residential uses such as lawns, gardens, parking areas, and play areas;

(6) excavations subject to the issuance of a permit under 76-5-405 and 76-5-406.

History: En. Sec. 6, Ch. 393, L. 1971; amd. Sec. 4, Ch. 294, L. 1973; amd. Sec. 198, Ch. 253, L. 1974; amd. Sec. 5, Ch. 271, L. 1974; R.C.M. 1947, 89-3506(2).

Cross-References

Recreational use of flood control channel prohibited, 23-2-301, 23-2-302.

76-5-402. Permissible uses within floodplain but outside of floodway.

Permits shall be granted for the following uses within that portion of the floodplain not contained within the designated floodway to the extent that they are not prohibited by any other ordinance, regulation, or statute:

(1) any use permitted in the designated floodway;

(2) structures, including but not limited to residential, commercial, and industrial structures, provided that:

(a) such structures meet the minimum standards adopted by the board;

(b) residential structures are constructed on fill such that the lowest floor elevation (including basements) is 2 feet above the 100-year flood elevation;

(c) commercial and industrial structures are either constructed on fill as specified in subsection (b) or are adequately floodproofed up to an elevation no lower than 2 feet above the 100-year flood elevation. Such floodproofing shall be in accordance with the minimum standards adopted by the board.

History: En. Sec. 6, Ch. 393, L. 1971; amd. Sec. 4, Ch. 294, L. 1973; amd. Sec. 198, Ch. 253, L. 1974; amd. Sec. 5, Ch. 271, L. 1974; R.C.M. 1947, 89-3506(3).

76-5-403. Prohibited uses within floodway.

The following nonconforming uses shall be prohibited within the designated floodway:

(1) a building for living purposes or place of assembly or permanent use by human beings;

(2) a structure or excavation that will cause water to be diverted from the established floodway, cause erosion, obstruct the natural flow of water, or reduce the carrying capacity of the floodway;

(3) the construction or permanent storage of an object subject to flotation or movement during flood level periods.

History: En. Sec. 6, Ch. 393, L. 1971; amd. Sec. 4, Ch. 294, L. 1973; amd. Sec. 198, Ch. 253, L. 1974; amd. Sec. 5, Ch. 271, L. 1974; R.C.M. 1947, 89-3506(4).

Cross-References

Recreational use of flood control channel prohibited, 23-2-301, 23-2-302.

76-5-404. Artificial obstructions and nonconforming uses.

(1) An artificial obstruction or nonconforming use in a designated floodplain or designated floodway enforced under 76-5-301 (1) and (2) and not exempt under subsections (2) or (3) of this section or 76-5-401 through 76-5-403 is a public nuisance unless a permit has been obtained for such artificial obstruction or nonconforming use from the department or the responsible political subdivision.

(2) It is unlawful for a person to establish an artificial obstruction or nonconforming use within a designated floodplain or a designated floodway without a permit from the department or the responsible political subdivision.

(3) (a) Parts 1 through 4 of this chapter do not affect any existing artificial obstruction or nonconforming use established in the designated floodplain or designated floodway before the land use regulations adopted by the political subdivision are effective or before the board has enforced a designated floodplain or a designated floodway under 76-5-301 (1) and (2).

(b) However, a person may not make nor may an owner allow alterations of an artificial obstruction or nonconforming use within a designated floodplain or a designated floodway whether the obstruction proposed for alteration was located in the floodplain or floodway before or after July 1, 1971, except upon express written approval of the department or the responsible political subdivision. Maintenance of an obstruction is not an alteration.

History: En. Secs. 5, 6, Ch. 393, L. 1971; amd. Secs. 3, 4, Ch. 294, L. 1973; amd. Secs. 197, 198, Ch. 253, L. 1974; amd. Secs. 4, 5, Ch. 271, L. 1974; R.C.M. 1947, 89-3505, 89-3506(1).

76-5-405. Variance for obstruction or nonconforming use.

(1) The department or the responsible political subdivision may issue permits for the establishment or alteration of artificial obstructions and nonconforming uses which would otherwise violate 76-5-401 through 76-5-404. The application for the permit shall be submitted to the department or the responsible political subdivision and contain such information as the department requires, including complete maps, plans, profiles, and specifications of the obstruction or use and watercourse or drainway.

(2) Permits for obstructions or uses to be established in the designated floodplain or designated floodway of watercourses must be specifically approved or denied within a reasonable time by the department or the responsible political subdivision. Permits for obstructions or uses in the designated floodplains or designated floodways shall be conclusively deemed to have been granted 60 days after the receipt of the application by the department or the responsible political subdivision or after such time as the board or the responsible political subdivision shall specify, unless the department or the responsible political subdivision notifies the applicant that the permit is denied. The responsible political subdivision shall send to the department a copy of each permit granted pursuant to this section and 76-5-406.

(3) An application for a permit shall be accompanied by a nonrefundable application fee of $10 which the state treasurer shall credit to the floodway obstruction removal fund.

(4) The department or the responsible political subdivision may make a part of the permit any reasonable conditions it may consider advisable. In order for the permit to continue to remain in force, the obstruction or use must be maintained so as to comply with the conditions and specifications of the permit.

History: En. Sec. 7, Ch. 393, L. 1971; amd. Sec. 199, Ch. 253, L. 1974; amd. Sec. 6, Ch. 271, L. 1974; R.C.M. 1947, 89-3507(part).

76-5-406. Criteria to be considered in connection with variance request.

In passing upon the application, the department or the responsible political subdivision shall consider in accordance with the minimum standards established by the board:

(1) the danger to life and property by water which may be backed up or diverted by the obstruction or use;

(2) the danger that the obstruction or use will be swept downstream to the injury of others;

(3) the availability of alternate locations;

(4) the construction or alteration of the obstruction or use in such a manner as to lessen the danger;

(5) the permanence of the obstruction or use;

(6) the anticipated development in the foreseeable future of the area which may be affected by the obstruction or use; and

(7) such other factors as are in harmony with the purpose of parts 1 through 4 of this chapter.

History: En. Sec. 7, Ch. 393, L. 1971; amd. Sec. 199, Ch. 253, L. 1974; amd. Sec. 6, Ch. 271, L. 1974; R.C.M. 1947, 89-3507(part).

Parts 5 through 10 reserved

Part 11
Water Conservation and Flood Control Projects

Part Cross-References

Flood Control Act of 1954 — distribution of revenue to counties, 17-3-231, 17-3-232.

Eminent domain for flooding from construction of dam, 70-30-104.

Flood control function of conservancy districts, 85-9-102.

76-5-1101. Water conservation and flood control projects authorized.

(1) Cities, towns, or counties, through their councils, boards of county commissioners, or other governing body, are hereby empowered, either individually or jointly, to engage or participate in the establishment of water conservation and flood control projects within the limits of such city, town, or county:

(a) for the protection or reclamation of property situated therein from floods or high waters and to protect property therein from the effects of flood water; and

(b) for the conservation, development, storage, distribution, drainage, and utilization of water for purposes beneficial to the district.

(2) Purposes beneficial to the district include but are not limited to industrial and municipal water supply, recreation and wildlife, irrigation, streamflow stabilization, household and domestic use, and pollution abatement whenever the establishment of such a water conservation and flood control system shall, in the judgment of the city council, board of county commissioners, or other governing body, be conducive to public convenience and welfare.

History: En. Sec. 1, Ch. 272, L. 1965; amd. Sec. 1, Ch. 284, L. 1967; R.C.M. 1947, 89-3301(part).

76-5-1102. Types of projects.

Such cities, towns, or counties in accordance with the provisions of this part, individually, jointly, or severally or in cooperation with the federal or state government or any department or agency thereof and with each other, may deepen, widen, straighten, alter, change, divert, or otherwise improve the watercourses within or without their limits by constructing levees, dikes, embankments, structures, impounding reservoirs, or conduits and improve, widen, and establish streets, alleys, and boulevards across and adjacent to the abandoned or new channel or conduit and provide for the payment of the cost and maintenance of such project or projects under the terms of this part.

History: En. Sec. 1, Ch. 272, L. 1965; amd. Sec. 1, Ch. 284, L. 1967; R.C.M. 1947, 89-3301(part).

76-5-1103. Water conservation and flood control activities declared public purpose.

Such water conservation and flood control activities and their establishment, construction, operation, and maintenance as authorized by this part are declared to be for the protection of the tax base of the city, town, or county; for the protection of public roads, lands, and improvements; for the protection of the public health, sanitation, and safety; and for improvement of the general welfare.

History: En. Sec. 2, Ch. 272, L. 1965; amd. Sec. 2, Ch. 284, L. 1967; R.C.M. 1947, 89-3302.

76-5-1104. Construction of part.

(1) This part and each section thereof shall be construed as granting additional power without limiting the power already existing in cities, towns, and counties.

(2) The provisions of this part and the methods of organization of water conservation and flood control projects are hereby declared to be an alternative method to any other method proposed by any law now in existence or hereafter enacted for the creation of such projects, and it is hereby declared that no provision hereof shall be amended or repealed by implication or otherwise as being in conflict with any existing law or future enactment unless specifically so declared by the legislature.

History: (1)En. Sec. 13, Ch. 272, L. 1965; Sec. 89-3313, R.C.M. 1947; (2)En. Sec. 12, Ch. 284, L. 1967; Sec. 89-3314, R.C.M. 1947; R.C.M. 1947, 89-3313, 89-3314.

76-5-1105. Division of work into parts.

Whenever any city, town, or county has begun a water conservation or flood control system, or both, under this part, the council, board, or other governing body shall have the power to divide the work into parts, sections, or districts;

to omit parts of said work; and to contract for any part or section separately and proceed therewith the same as if the entire work or improvements were contracted for, done, or made.
History: En. Sec. 11, Ch. 272, L. 1965; amd. Sec. 11, Ch. 284, L. 1967; R.C.M. 1947, 89-3311.

76-5-1106. Requirements to change project boundaries.
The boundaries of a project once established shall not be extended without the vote of a majority of the electors residing in the area proposed to be annexed. Such electors are to be determined, and such election is to be held in accordance with the provisions of 76-5-1117.
History: En. Sec. 1, Ch. 272, L. 1965; amd. Sec. 1, Ch. 284, L. 1967; R.C.M. 1947, 89-3301(part).

76-5-1107. Direction and construction responsibility of state or federal government — local role.
This part contemplates that the actual direction of the project and the doing of the work in connection therewith is assumed by either the state or the federal government and the city, town, or county provides and assumes the cost of necessary right-of-way over and above such contributions in that regard as the federal government may choose to make. Under such limitation, all appropriate portions of this part shall apply.
History: En. Sec. 6, Ch. 272, L. 1965; amd. Sec. 5, Ch. 284, L. 1967; R.C.M. 1947, 89-3306.

76-5-1108. Acquisition of property.
(1) Cities, towns, and counties may acquire by gift, purchase, or condemnation and appropriation private property within the limits of the project, including the right to cross railroad right-of-way and property and highway right-of-way and property, so as not to impair the previous public use, as may be necessary to carry into effect the provisions of this part and to provide an outlet for the watercourses, either natural or artificial, which may be deepened, widened, straightened, altered, changed, diverted, or otherwise improved under the provisions of this part.
(2) All provisions of the laws of Montana relating to the condemnation of lands for public purposes shall apply to the provisions thereof insofar as applicable.
History: En. Sec. 3, Ch. 272, L. 1965; amd. Sec. 3, Ch. 284, L. 1967; R.C.M. 1947, 89-3303.

Cross-References
Eminent domain, Art. II, sec. 29, Mont. Const.; Title 70, ch. 30.

76-5-1109. Contracts for use of railroads and highways.
A city, town, or county may contract with a railroad company or with the department of transportation for the use of railroad or highway rights-of-way and embankments and other railroad or highway property which can be utilized by the city, town, or county for the purpose of water conservation or flood control or protection as part of its water conservation or flood control system, or both, for a period not exceeding 99 years.
History: En. Sec. 10, Ch. 272, L. 1965; amd. Sec. 10, Ch. 284, L. 1967; amd. Sec. 207, Ch. 316, L. 1974; R.C.M. 1947, 89-3310; amd. Sec. 3, Ch. 512, L. 1991.

Compiler's Comments 1991
1991 Amendment: Substituted references to Department of Transportation for references to Department of Highways. Amendment effective July 1, 1991.

76-5-1110. Cooperation with governmental, public, and private agencies.
(1) Cities, towns, and counties may in accordance with the provisions of this part:
(a) accept funds and property or other assistance, financial or otherwise, from federal, state, and other public or private sources for the purpose of aiding the construction and maintenance of water conservation and flood control projects; and
(b) cooperate and contract with the state or federal government or any department or agency thereof in furnishing assurances and meeting local cooperation requirements of any project involving control, conservation, and use of water.
(2) Cities, towns, and counties may also enter into agreement with the federal government to maintain levees, dikes, or other construction and to do all other acts required by the federal government in maintaining the work when completed.
History: En. Secs. 4, 7, Ch. 272, L. 1965; amd. Secs. 4, 6, Ch. 284, L. 1967; R.C.M. 1947, 89-3304, 89-3307(part).

76-5-1111. Apportionment of costs.
(1) The cost of all right-of-way acquired by purchase or condemnation together with any other property rights which may be required in furtherance of such projects, may be borne by the city, town, or county.
(2) The work of actual construction and the cost thereof may be borne by the federal government.
History: En. Sec. 5, Ch. 272, L. 1965; R.C.M. 1947, 89-3305.

76-5-1112. Sources of funds for cost of acquiring right-of-way and other costs.

(1) The council, board, or governing body shall have power to allocate a portion of the street or road fund, as the case may be, for the purpose of acquiring right-of-way or the operation and maintenance of completed projects.

(2) Cities, towns, and counties in furtherance of such water conservation and flood control projects may accept contributions to enable them to pay for necessary right-of-way.

(3) The council, board of county commissioners, or other governing body shall also have the authority to receive and accept appropriations and contributions from any source of either money or property or other things of value to be held, used, and applied for the purposes provided in this part.

History: (1)En. Sec. 8, Ch. 272, L. 1965; amd. Sec. 7, Ch. 284, L. 1967; Sec. 89-3308, R.C.M. 1947; (2)En. Sec. 7, Ch. 272, L. 1965; amd. Sec. 6, Ch. 284, L. 1967; Sec. 89-3307, R.C.M. 1947; (3)En. Sec. 9, Ch. 284, L. 1967; Sec. 89-3309.1, R.C.M. 1947; R.C.M. 1947, 89-3307(part), 89-3308, 89-3309.1(part).

76-5-1113. Special assessments for operation and maintenance authorized.

(1) Any city, town, or county that shall establish a water conservation or flood control system, or both, pursuant to this part may for the purpose of providing funds for the operation and maintenance thereof levy an annual special assessment against all real property in the area benefiting from such system.

(2) Such special assessments for the operation and maintenance of any system authorized by this part shall be levied as are other special improvement levies as required by law.

History: En. Sec. 9, Ch. 272, L. 1965; amd. Sec. 8, Ch. 284, L. 1967; R.C.M. 1947, 89-3309(part).

Cross-References

Special improvement district assessments, Title 7, ch. 12, part 41.

76-5-1114. Determination of assessment.

(1) The special assessment shall be:

(a) levied against each lot or parcel of land in the benefited area for that portion of the money required which its area bears to the total area of all of the lands to be assessed; or

(b) at the option of the governing body of the city, town, or county, as the case may be, based upon the taxable valuation, as stated in the last completed county assessment roll, of the lots or parcels of land, exclusive of improvements thereon, within said benefited area; in which case each lot or parcel of land to be assessed shall be assessed with that part of the amount of money required which its taxable valuation bears to the total taxable valuation of all of the lands to be assessed.

(2) However, where the benefited area lies in more than one county or lies both within a county and also a city or town, the same method of assessment shall be used for each governing body.

History: En. Sec. 9, Ch. 272, L. 1965; amd. Sec. 8, Ch. 284, L. 1967; R.C.M. 1947, 89-3309(part).

76-5-1115. Fees and charges authorized.

Cities, towns, and counties may for the purpose of providing funds for the operation and maintenance of completed projects fix, maintain, and collect fees, rents, tolls, and other charges for services rendered or facilities provided.

History: En. Sec. 9, Ch. 284, L. 1967; R.C.M. 1947, 89-3309.1(part).

76-5-1116. Determination of fees and charges.

(1) In fixing such rate, fee, toll, or rent for water furnished for household use, domestic use, irrigation use, industrial use, and municipal use and for water used for streamflow stabilization, the governing body shall charge a fee sufficient to pay the proportionate share of the repairs, maintenance, and operating expenses as such use bears in economic value to the total economic value of the total use of said facilities of the project or projects. The economic value is to be determined by the governing body.

(2) For the benefits received by areas within the boundaries of the project or projects for flood prevention, flood control, and pollution abatement, the governing body shall determine a reasonable valuation or charge, which valuation or charge shall be certified by them to the county commissioners prior to the time general taxes are levied and assessed. It shall be the obligation of the county commissioners to levy a special assessment as provided for in 76-5-1113 and 76-5-1114 against such area or areas sufficient to provide revenues for the repairs, maintenance, and operating expenses of the project.

(3) For recreation use the governing body shall first determine the share of the costs of operation, repairs, and depreciation to be charged against such uses and from this figure shall subtract the estimated amount of fees and tolls collected for such uses. The deficiency, if any, shall be certified to the county commissioners in

the same way as the charges for flood prevention, flood control, etc., and special assessments shall be levied by the county commissioners in the manner set out herein.
History: En. Sec. 9, Ch. 284, L. 1967; R.C.M. 1947, 89-3309.1(part).

76-5-1117. Bonds authorized — procedure. Cities, towns, and counties are authorized to contract indebtedness and to issue special improvement district or rural improvement district bonds to provide funds for the payment of the cost of improvements contemplated by this part by following the procedures established for the issuance of such bonds under the provisions of Title 7, chapter 12, part 42, as to cities and towns and Title 7, chapter 12, part 21, as to counties. Payment and security for the bonds shall be provided by following the following procedures:

(1) Tax assessments for the payment of the bonds shall be levied in accordance with Title 7, chapter 12, parts 41 and 42, or Title 7, chapter 12, part 21, as to cities and counties, respectively, or 76-5-1114(1).

(2) A revolving fund, to be pledged for the security of the bonds, must be established pursuant to the provisions of Title 7, chapter 12, part 42, as to cities and towns, and Title 7, chapter 12, part 21, as to counties, by the governing body authorizing the issuance of the bonds.
History: En. Sec. 12, Ch. 272, L. 1965; amd. Sec. 1, Ch. 239, L. 1971; R.C.M. 1947, 89-3312; amd. Sec. 15, Ch. 266, L. 1979; amd. Sec. 1, Ch. 209, L. 1981.

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

CHAPTER 15

FLOODPLAIN MANAGEMENT ENGINEERING BUREAU

Sub-Chapter 1

Definitions

Rule 36.15.101 Definitions

Sub-Chapter 2

Regulation and Enforcement

Rule 36.15.201 Local Regulation and Enforcement
36.15.202 Board Approval of Local Regulations and Enforcement
36.15.203 Time Limit for Adoption of Local Regulations
36.15.204 Local Regulations - Requirements
36.15.205 Board Review of Local Enforcement
Rules 36.15.206 through 36.15.208 Reserved
36.15.209 Department Regulation and Enforcement
36.15.210 Environmental Impact Statements
Rules 36.15.211 through 36.15.215 Reserved
36.15.216 Permits - Criteria - Time Limits
36.15.217 Waiver of Permit for Emergency Repair or Replacement
36.15.218 Variances

Sub-Chapters 3 and 4 Reserved

Sub-Chapter 5

Floodplain and Floodway Delineations

Rule 36.15.501 Floodplain and Floodway Delineation - Data Used - Hydrological Certainty

Rule 36.15.502 Floodway Delineation

36.15.503 Public Input on Proposed Designed Floodplains or Floodways

36.15.504 Local Government Adjustments to Proposed Floodway Delineation

36.15.505 Alteration of Floodplains and Floodways

Sub-Chapter 6

Designated Floodway Minimum Standards

Rule 36.15.601 Uses Allowed Without Permits

36.15.602 Uses Requiring Permits

36.15.603 Permits for Water Diversions

36.15.604 Minimum Criteria for Permits

36.15.605 Prohibited Uses

36.15.606 Permits for Flood Control Work

Sub-Chapter 7

Flood Fringe Minimum Standards

Rule 36.15.701 Allowed Uses

36.15.702 Flood Proofing for Commercial and Industrial Structures

36.15.703 Prohibited Uses

Sub-Chapter 8

Designated Floodplain Only Minimum Standards

Rule 36.15.801 Allowed Uses Where Floodway Not Designated or No Flood Elevations

FLOODPLAIN MANAGEMENT

Sub-Chapter 9

Flood Proofing Requirements

Rule 36.15.901	Flood Proofing Requirements for Electrical Systems
36.15.902	Flood Proofing Requirements for Heating Systems
36.15.903	Flood Proofing Requirements for Plumbing Systems

NEXT PAGE IS 36-275

Sub-Chapter 1

Definitions

36.15.101 DEFINITIONS In addition to the definition of terms contained in Section 76-5-103, MCA, and unless the context requires otherwise, as used in the Act and in this chapter:

(1) "Act" means Title 76, chapter 5, MCA, as amended.

(2) "Alteration" means any change or addition to an artificial obstruction that either increases the size of the artificial obstruction or increases its potential flood hazard Maintenance of an artificial obstruction is not an alteration.

(3) "Artificial obstruction" means any obstruction which is not natural and includes any dam, diversion, wall, riprap, embankment, levee, dike, pile, abutment, projection, revetment, excavation, channel rectification, bridge, conduit, culvert, building, refuse, automobile body, fill or other analogous structure or matter in, along, across, or protecting into any 100-year floodplain which may impede, retard, or alter the pattern of flow of water, either in itself or by catching or collecting debris carried by the water, or that is placed where the natural flow of water would carry the same downstream to the damage or detriment of either life or property.

(4) "Base flood" means a flood having a one percent (1%) chance of being equalled or exceeded in any given year. A base flood is the same as a flood of 100-year frequency.

(5) "Base flood elevation" means the elevation above sea level of the base flood in relation to national geodetic vertical datum of 1929, unless otherwise specified.

(6) "Board" means the board of natural resources and conservation.

(7) "Channelization project" means the excavation and construction of an artificial channel for the purpose of diverting the entire flow of a watercourse or drainway from its established course.

(8) "Department" means the department of natural resources and conservation.

(9) "Establish" means to construct, place, insert, or excavate.

(10) "Flood fringe" means that portion of a designated floodplain outside the limits of a designated floodway.

(11) "Floodplain," means the area adjoining the watercourse or drainway which would be covered by the floodwater of a base flood except for sheetflood areas that receive less than 1 foot of water per occurrence and are considered zone b areas by the federal emergency management agency. The floodplain consists of the floodway and flood fringe.

(12) "Flood boundary" the designated floodplain boundary is based on base flood elevations. The mapped floodplain boundary may be used as a guide for determining whether property is within the designated floodplain, but the exact boundary shall be determined according to the base flood elevation.

(13) "Floodway," means the channel of a watercourse or drainway and those portions of the floodplain adjoining the channel which are reasonably required to carry and discharge the floodwater of any watercourse or drainway.

(14) "Lowest floor" means any floor used for living purposes, storage, or recreation. This includes any floor that could be converted to such a use.

(15) "Manufactured home" means a structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. For floodplain management purposes it also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.

(16) "Permit issuing authority" means the responsible political subdivision, if any, or the department if there is no responsible political subdivision.

(17) "Responsible political subdivision" means a political subdivision that has received board approval of its adopted land use regulations and administrative and enforcement procedures in accordance with section 76-5-302, MCA, and ARM 36.15.201 through 36.15.204.

(18) "Riprap" means stone, rock, concrete block, or analogous material that is placed along the banks or bed of a watercourse or drainway for the purpose of alleviating erosion.

(19) "Sheetflooding" means areas subject to 100-year flooding with depths less than one (1) foot. Sheetflood areas are generally removed from the main stream channel and have been identified as zone b by FEMA or as a sheetflood zone by the soil conservation service.

(20) "Start of construction" for purposes of these rules means the commencement of clearing, grading, filling or excavation for the purposes of preparing a site for construction.

(21) "Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50) of the market value of the structure either:

(a) before the improvement or repair is started, or

(b) if the structure has been damaged, and is being restored, before the damage occurred. For the purposes of this definition, substantial improvement is considered to occur when the first construction to any wall, ceiling, floor, or other structural part of the building commences. The term does not include:

(i) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or

(ii) any alteration of a structure listed on the national register of historic places or state inventory of historic places

(22) "Suitable fill" means fill material which is stable, compacted, well graded, pervious, not adversely affected by water and frost, devoid of trash or similar foreign matter, tree stumps, or other organic material; and is fitting for the purpose of supporting the intended use and/or permanent structure.

(23) "Variance" means a grant or relief from the requirements of these rules which would permit construction in a manner that would otherwise be prohibited by these rules.

(24) "100 year frequency flood" - See "base flood". (History: Sec. 76-5-208, MCA; ,IMP, Sec. 76-5-208 and Sec. 76-5-404, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

NEXT PAGE IS 36-279

Sub-Chapter 2

Regulation and Enforcement

36.15.201 LOCAL REGULATION AND ENFORCEMENT (1) If a political subdivision adopts land use regulations that equal or exceed the minimum standards contained in sub-chapters 6 through 9 of these rules within the time specified and if the administrative and enforcement procedures for such regulations meet the requirements of these rules and are approved by the board in accordance with section 76-5-302, MCA, no permit will be required from the department. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-302, MCA; NEW, Eff. 9/4/74; EMERG, AMD, Eff. 9/4/75.)

36.15.202 BOARD APPROVAL OF LOCAL REGULATIONS AND ENFORCEMENT (1) Copies of all regulations and administrative and enforcement procedures proposed to be adopted by a political subdivision to meet the requirements of the Act and these rules shall be sent to the department for approval by the board.

(2) The department will notify the political subdivision by letter of board approval or disapproval.

(3) Any changes to the regulations or administrative and enforcement procedures proposed to be adopted by a political subdivision shall be sent to the department for approval by the board. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-302, MCA; NEW, Eff. 9/4/74; EMERG, AMD, Eff. 9/4/75; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.203 TIME LIMIT FOR ADOPTION OF LOCAL REGULATIONS

(1) After a floodway or a floodplain has been designated by the board, the department shall notify the affected political subdivisions and set forth the date by which the political subdivision must adopt land use regulations and administrative and enforcement procedures in accordance with the Act and these rules. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-302, MCA; NEW, Eff. 9/4/74; EMERG, AMD, Eff. 9/4/75; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.204 LOCAL REGULATIONS - REQUIREMENTS (1) Land use regulations adopted by a local political subdivision in conformance with the Act and these rules may include zoning, building codes, and subdivision regulations adopted pursuant to other enabling statutory authority, such as Title 76, chapters 1 and 3; Title 76, chapter 2, part 3; and Title 76, chapter 2, parts 1 and 2, MCA; as well as regulations adopted under the authority given in sections 76-5-404 through 76-5-406, MCA.

(2) Any land use regulations and administrative and enforcement procedures adopted to comply with the Act and these rules must include the following:

(a) A permit is required prior to the new construction, substantial improvement or alteration of any artificial obstruction;

(b) Regulations governing the granting of permits must be at least as stringent as the minimum standards contained in these rules;

(c) Provisions for providing notice to the department, adjacent property owners, and the public of proposed actions requiring a permit or variance in accordance with these rules. Notice shall be published in a legal newspaper published or of general circulation in the area and shall include a brief description of the proposed activity. There shall be a period not less than fifteen days following publication of notice to receive comment regarding the proposed activity for consideration prior to issuance of a permit or variance. If the responsible political subdivision determines that comments warrant it, a hearing may be held to determine if the proposed issuance or denial of a permit or the proposed issuance or denial of a variance is in accordance with adopted regulations and these rules.

(d) The approval of the department must be obtained prior to the approval by the political subdivision pursuant to ARM 36015.216(3) of any permit application that is in variance with the adopted regulations and these rules;

(e) Copies of all permits and variances granted must be sent to the department;

(f) Before the regulations are effective, all known property owners within the designated floodplain and designated floodway must be notified by mail by the political subdivision that their property is located within the designated floodplain or floodway and is subject to regulation. This notification provision shall not apply to political subdivisions that have adopted building codes requiring permits for new construction or to municipalities or counties that have received flood hazard boundary maps or flood insurance rate maps from the United States department of housing and urban development or the federal emergency management agency;

(g) A disclosure provision requiring all property owners with property in a designated floodplain or floodway, or their agents to notify potential buyers that such property is located within the designated floodplain or floodway and is subject to regulation;

(h) An official must be hired or appointed with the authority to review permit applications and proposed uses or construction to determine compliance with the Act, these rules, and the regulations adopted by the political subdivision.

(3) The regulations may also include the following:

(a) requirements that existing nonconforming uses be inspected and documented to insure future compliance;

(b) the imposition of a reasonable application fee for the processing of permit applications. The fee may cover the costs of providing public notice, processing permits and variances, and performing sufficient field inspections to ensure compliance with these rules. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-302, MCA; NEW, Eff. 9/4/74; EMERG, AMD, Eff. 9/4/75; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.205 BOARD REVIEW OF LOCAL ENFORCEMENT (1) The department shall periodically report to the board on permit and variances filed, complaints received, and any other relevant information on the administration and enforcement of local regulations by the responsible political subdivision.

(2) If the board determines that the responsible political subdivision has failed to comply with the intent, purposes, or provisions of the local regulations, these rules, or the Act, the board may, after hearing, suspend the powers of the responsible political subdivision. In accordance with ARM 36.15.209 the department shall enforce the minimum standards adopted by the board until such time as the board determines that the responsible political subdivision will comply. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-302(2), MCA; NEN, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.206 through 36.15.208 reserved

NEXT PAGE IS 36-283

36.15.209 DEPARTMENT REGULATION AND ENFORCEMENT (1) If the political subdivision fails to adopt land use regulations and administrative and enforcement procedures that meet or exceed the minimum standards required by the Act and these rules within the time specified, or fails to enforce the regulations, the minimum standards set forth in the Act and these rules regulating the designated floodplain or floodway will be enforced by the department.

(2) An application to the department for a permit shall be made on a standard form furnished by the department and shall include all applicable information listed on the form.

(3) The permit, if approved, will be given by the department on a standard form.

(4) A permit application requiring an environmental impact statement will be specifically approved or denied by the department only after full compliance with the provisions of the Montana Environmental Policy Act. Normally, the period of time required for review of these permit applications will be from 60 to 120 days. (History: Sec. 76-5 208, MCA; IMP, Sec. 76-5-301 and 76-5-405, MCA; NEW, Eff. 9/4/74, AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.210 ENVIRONMENTAL IMPACT STATEMENTS

(IS HEREBY REPEALED) (History: Sect. 76-5-208, MCA; IMP, Sec. 76-5-405, MCA; NEW, Eff. 9/4/74, REP, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.211 through 36.15.215 reserved

NEXT PAGE IS 36-287

36.15.216 PERMITS - CRITERIA - TIME LIMITS (1) Permits shall be granted or denied by the permit issuing authority on the basis of whether the proposed new construction, substantial improvement, or alteration of an artificial obstruction meets the requirements of the Act and the minimum standards established by the board in these rules.

(2) Additional factors that shall be considered for every permit application are:

(a) the danger to life and property from backwater or diverted flow caused by the obstruction;

(b) the danger that the obstruction will be swept downstream to the injury of others;

(c) the availability of alternative locations;

(d) the construction or alteration of the obstruction in such manner as to lessen the danger;

(e) the permanence of the obstruction;

(f) The anticipated development in the foreseeable future of the area which may be affected by the obstruction; and,

(g) such other factors as are in harmony with the purposes of the Act and these rules.

(3) A permit application is considered to have been automatically granted 60 days after receipt of the application, unless the permit issuing authority notifies the applicant before the 60th day that additional information is required, more time is required to process the application, or that the permit is denied. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-405 and 76-5-406, MCA; NEW, Eff. 9/4/74; AND, 1988 NAR p. 1537, Eff. 7/15/88; AND, 1989 NAR p. 1665, Eff. 10/27/89.)

36.15.217 WAIVER OF PERMIT FOR EMERGENCY REPAIR OR REPLACEMENT (1) Emergency repair to and/or replacement of severely damaged public transportation facilities, public water and sewer facilities, and flood control works may be authorized and permit requirements waived if:

(a) Upon notification and prior to the emergency repair and/or replacement, the permit issuing authority determines that an emergency condition warranting immediate action exists; and

(b) The permit issuing authority agrees upon the nature and type of proposed emergency repair and/or replacement.

(2) Authorization to undertake emergency repair and/or replacement work may be given verbally if the permit issuing authority feels that a written authorization would unduly delay the emergency work. Such verbal authorization must be followed by a written authorization stating the emergency condition, the type of emergency work agreed upon, and a notation that verbal authorization had been previously given. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-405 and Sec. 76-5-406, MCA; NEW, 9/4/74.)

36.15.218 VARIANCES (1) The permit issuing authority may grant a variance for the new construction, substantial improvement or alteration of an artificial obstruction that is not in compliance with the minimum standards contained in these rules only if:

(a) the proposed use would not increase flood hazard either upstream or downstream in the area of insurable buildings

(b) refusal of a variance would because of exceptional circumstances cause a unique or undue hardship on the applicant or community involved;

(c) the proposed use is adequately floodproofed;

(d) reasonable alternative locations outside the designated floodplain are not available. (History: Sec. 76-5-405 and 76-5-406, MCA; IMP, Sec. 76-5-405 and 76-5-406, MCA; NEW, 1989 MAR p. 1665, Eff. 10/27/890)

Sub-Chapters 3 and 4 reserved

NEXT PAGE IS 36-299

Sub-Chapter 5

Floodplain and Floodway Delineations

36.15.501 FLOODPLAIN AND FLOODWAY DELINEATION - DATA USED - HYDROLOGICAL CERTAINTY (1) All floodplain delineation studies, reports, maps, and water surface profiles used by the department and board to establish designated floodplains shall be based upon the base flood.

(2) Each floodplain delineation study arranged by the department will, insofar as time and funds permit, include a water surface profile showing the elevation of the base flood and a suggested designated floodway.

(3) The department and board will also utilize flood hazard maps and data provided by the U.S. department of housing and urban development or the federal emergency management agency for the national flood insurance program as a basis for establishing the designated floodplain. Such maps will delineate the boundaries of the base flood but will not generally include flood elevations or floodway data.

(4) Designated floodplains established for areas where flood elevations and/or floodway data are lacking shall be regulated in accordance with ARM 36.15.801.

(5) The designation of floodplains and floodways shall be based upon reasonable hydrological certainty. Flood hazard maps that do not include floodway data or base flood elevations constitute a rebuttable presumption of reasonable hydrological certainty.

(6) The designated floodplain boundary is based on base flood elevations. The mapped floodplain boundary may be used as a guide for determining whether property is within the designated floodplain, but the exact boundary shall be determined according to the base flood elevation. If the local administrator determines it is unclear whether property is in or out of the floodplain, the local administrator shall require the applicant to provide additional information which may include elevations obtained through a level survey performed by a professional engineer or register land surveyor. (History: Sec. 76-5-201, 76-5-202, and 76-5-208, MCA; ~ Sec. 76-5-201 and 76-5-202, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.502 FLOODWAY DELINEATION (1) The delineations of a designated floodway shall be based on the channel of the water course or drainway and those portions of the adjoining floodplain which are reasonably required to carry the discharge of the base flood without cumulatively increasing the water surface more than one half foot.

(2) In areas having appreciable urban development on the floodplain, the outer boundary lines of the floodway may generally follow the riverward limits of development provided that:

(a) The calculated elevation of the base flood would not be increased more than 0.5 of a foot as a result of any adjustment to the floodway;

(b) Floodway lines are compatible with local land use plans; and,

(c) The flood fringe does not contain appreciable areas with flood velocities greater than 3 feet per second or flood depths greater than 3 feet.

(3) After delineation of a suggested designated floodway and prior to the public hearing to consider the floodway delineation, the department shall meet with local planning officials to consider possible adjustments due to land use considerations. No adjustments in floodway width or location may be made if the theoretical increase in flood heights would exceed 0.5 foot or if adjustments affect private property rights. (History: Sec. 76-5-201, 76-5-202, and 76-5-208, MCA; IMP, Sec. 76-5-201 and 76-5-202, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.503 PUBLIC INPUT ON PROPOSED DESIGNATED FLOODPLAINS OR FLOODWAYS (1) The department shall at least 3 weeks prior to any hearing held for the purpose of establishing a designated floodplain or floodway furnish the affected political subdivisions maps and other data showing the proposed designated floodplain or floodway together with a letter requesting the political subdivision to furnish any pertinent data on flood hazards.

(2) Notice of a hearing or order of the board establishing or altering designated floodplains and floodways shall be published once each week for three (3) consecutive weeks in a legal newspaper published or of general circulation in the area involved, the last publication of notice shall be not less than 10 days prior to the hearing or order by the board.

(3) The department shall also issue news releases at least 3 weeks prior to any hearing requesting the public to submit any available data concerning flood hazard, flood elevations, or the proposed designated floodplain or floodway boundaries. (History: Sec. 76-5-202 and 76-5-204, MCA; IMP, Sec. 76-5-201 through 76-5-204, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.504 LOCAL GOVERNMENT ADJUSTMENTS TO PROPOSED FLOODWAY DELINEATION (1) After the delineation of a suggested designated floodway by the department and prior to tho public hearing to consider the floodway delineations, the department shall meet with local governmental and planning officials to consider possible adjustments due to local land use consideration.

(2) No adjustments in floodway width or location may be made, however, if such adjustments would theoretically increase flood heights beyond the permissible limits noted in ARM 36.15.502. (History: Sec. 76-5-208, MCA, Sec. 76-5-201 and Sec. 76-5-202, MCA; NEW, 9/4/74.)

36.15.505 ALTERATION OF FLOODPLAINS AND FLOODWAYS

(1) The board may alter a designated floodplain or designated floodway, after a public hearing, when sufficient data become available.

(a) When scientific or technical flood data shows that the base flood elevation was erroneously established and the designation of the floodplain boundary was therefore incorrect.

(b) When property has been raised to a level above the base flood elevation by suitable fill provided that:

(i) the filled area is contiguous to areas naturally above the base flood elevation and not within the designated floodplain;

(ii) the filled area is a minimum of 2 feet above the base flood elevation;

(iii) the fill is suitable material according to definition in ARM 36.15.101 and is not subject to settlement and has been compacted to 95 percent of the maximum density obtainable with the standard proctor test method of the American society for testing and materials (ASTM Standard D698) or equivalent;

(iv) no portion of the fill is within the floodway;

(v) the fill slope must not be steeper than 1 1/2 horizontal to 1 vertical unless substantiating data justifying a steeper slope is provided and adequate erosion protection is provided for fill slopes exposed to floodwaters. The erosion protection for fill slopes exposed to velocities of four feet per second and less may consist of vegetative cover consisting of grasses or similar undergrowth as approved by the permit issuing authority. Slopes exposed to velocities greater than four feet per second shall be protected by armoring with stone or rock slope protection;

(vi) compaction of earthen fill and erosion protection measures must be certified as meeting these criteria by a registered professional engineer;

(vii) the fill does not increase the elevation of the base flood in areas of existing development.

(c) when areas have been protected by a properly engineered flood protection project provided that:

(i) dams are designed and operated for flood control purposes and constructed in accordance with acceptable safety standards and the Montana Dam Safety Act;

(ii) levees and floodwalls comply with ARM 36.15.606 and are publicly owned and maintained. Minimum freeboard above the base flood elevation shall be three feet with an additional foot 100 feet either side of a structure such as bridges. An additional 1/2 foot above the minimum is required at the upstream end of the levee, tapering to the minimum at the downstream end. The levee must be designed and constructed to offer base flood protection without human supplementation. Human intervention is only acceptable for the operation of closure structures such as gates or stop logs. A levee system designed for human operation of closures are acceptable provided that:

(A) adequate warning time exists for the operation of closures before floodwaters reach the base of the closure,

(B) the closure is an integral part of the system during operation,

(C) operation and maintenance of closure structures are responsibilities mandated by local regulation with periodic operation performed for testing and training purposes,

(D) a formal operation plan is available and capable of being implemented.

(iii) dams and levees must be designed by a registered professional engineer and flood protection certified as adequate to provide protection from the base flood;

(iv) floodway channels designed by a registered professional engineer may carry less than the discharge of the base flood provided that they do not increase the extent of flooding.

(2) No alteration of a designated floodplain is required when property located within the flood fringe is naturally above the base flood elevation as proven by a certified elevation survey provided by a registered professional engineer or licensed land surveyor. (History: Sec. 76-5-204, MCA; IMP, Sec. 76-5-204, MCA; NEW, 1989 MAR p. 1665, Eff. 10/27/89.)

NEXT PAGE IS 36-309

Sub-Chapter 6

Designated Floodway Minimum Standards

36.15.601 USES ALLOWED WITHOUT PERMITS (1) The following open space uses shall be allowed without a permit anywhere within the designated floodway provided that they are not prohibited by any other ordinance or statute and provided that they do not require structures other than portable structures, fill, or permanent storage of materials or equipment:

(a) agricultural uses;

(b) industrial-commercial uses such as loading areas, parking areas, and emergency landing strips;

(c) private and public recreational uses such as golf courses, driving ranges, archery ranges, picnic grounds, boatlaunching ramps, swimming areas, parks, wildlife management and natural areas, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, and hiking and horseback riding trails;

(d) forestry, including processing of forest products with portable equipment; and

(e) residential uses such as lawns, gardens, parking areas, and play areas.

(2) In addition to the uses specified in the preceding subsection, the following uses and their accessories do not in the judgment of the board endanger health or safety or cause increased flood heights and shall thus be allowed without a permit in the designated floodway:

(a) irrigation and livestock supply wells provided that they are located at least 500 feet from domestic water supply wells; and

(b) fences, except permanent fences crossing channels. (History: Sec. 76-5-208 and 76-5-406, MCA; IMP, Sec. 76-5-401, Sec. 76-5-405, and 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.602 USES REQUIRING PERMITS In addition to the uses allowed under ARM 36.15.601, the following artificial obstructions may be permitted within the designated floodway subject to the issuance of a permit by the permit issuing authority under the conditions set forth in this rule and ARM 36.15.603 and 36.15.604:

(1) excavation of material from pits or pools provided that:

(a) a buffer strip of undisturbed land of sufficient width to prevent flood flows from channeling into the excavation is left between the edge of the channel and the edge of the excavation;

(b) the excavation meets all applicable laws and regulations of other local and state agencies; and

(c) excavated material is stockpiled outside the designated floodway;

(2) railroad, highway, and street stream crossings provided that the crossings are designated to offer minimal obstruction to flood flow;

(3) limited filling for highway, street, and railroad embankments not associated with stream crossings provided that:

(a) reasonable alternative transportation routes outside the designated floodway are not available; and

(b) such floodway encroachment is located as far from the stream channel as possible;

(4) Buried or suspended utility transmission lines provided that:

(a) suspended utility transmission lines are designed such that the lowest point of the suspended line is at least 6 feet higher than the elevation of the base flood;

(b) towers and other appurtenant structures are designed and placed to withstand and offer minimal obstruction to flood flows; and

(c) utility transmission lines carrying toxic or flammable materials are buried to a depth at least twice the calculated maximum depth of scour for the base flood. The maximum depth of scour may be determined from any of the accepted hydraulic engineering methods, but the final calculated figure shall be subject to approval by the permit issuing authority;

(5) storage of materials and equipment provided that:

(a) the material or equipment is not subject to major damage by flooding and is properly anchored to prevent flotation or downstream movement, or,

(b) the material or equipment is readily removable within the limited time available after flood warning. Storage of flammable, toxic, or explosive materials shall not be permitted;

(6) domestic water supply wells provided that:

(a) they are driven or drilled wells located on ground higher than surrounding ground to assure positive drainage from the well;

(b) well casings are watertight to a distance of at least 25 feet below the ground surface;

(c) water supply and electrical lines have a watertight seal where the lines enter the casing;

(d) all pumps and electrical lines and equipment are either of the submersible type or are adequately floodproofed; and

(e) check valves are installed on main water lines at wells and at all building entry locations;

(7) buried and sealed vaults for sewage disposal in recreational areas provided that they meet applicable laws and standards administered by the department of health and environmental sciences;

(8) Public or private campgrounds provided that:

(a) access roads require only limited fill and do not obstruct or divert flood waters; and,

(b) no dwellings or permanent mobile homes are allowed;

(9) structures accessory to the uses permitted in this subsection such as boat docks, marinas, sheds, permanent fences crossing channels, picnic shelters and tables, and toilets provided that:

(a) the structures are not intended for human habitation;

(b) the structures will have a low flood damage potential;

(c) the structures will insofar as possible be located on ground higher than the surrounding ground and as far from the channel as possible;

(d) the structures will be constructed and placed so as to offer a minimal obstruction to flood flows;

(e) the structures will be firmly anchored to prevent flotation; and,

(f) service facilities within these structures such as electrical, heating, and plumbing facilities are floodproofed in accordance with ARM 36.15.901 through 36.15.903;

(10) all other artificial obstructions not specifically listed in this subsection or in ARM 36.15.606, not allowed under ARM 36.15.601, and not prohibited under ARM 36.15.605. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-404 through 765-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.603 PERMITS FOR WATER DIVERSIONS (1) As provided in the Montana Water Use Act of 1973, sections 85-2-302 and 85-2-402, MCA, all new surface water diversions and changes in place of diversion after July 1, 1973, require permits or approval, respectively, from the department. Within designated floodways, the department shall review each proposed diversion and change in place of diversion to determine if flood flows may be affected.

(2) If it appears that a proposed diversion or change in place of diversion may significantly affect flood flows, the department may require the applicant to provide additional information and to apply for a permit with the permit issuing authority under Title 76, chapter 5, MCA, as amended.

(3) A permit under Title 76, Chapter 5, MCA, as amended, shall not be granted if in the judgment of the permit issuing authority:

(a) the proposed diversion will increase the upstream elevation of the base flood a significant amount (0.5 of a foot or as otherwise determined by the permit issuing authority);

(b) the proposed diversion is not designed and constructed to minimize potential erosion from a base flood; and,

(c) any permanent diversion structure crossing the full width of the stream channel is not designed and constructed to safely withstand up to a base flood. (History: Sec. 76-5-208 MCA; IMP, Sec. 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.604 MINIMUM CRITERIA FOR PERMITS 1) In addition to the requirements of ARM 36.15.602 and 36.150603, a permit shall not be approved for new construction, substantial improvement, or alteration of an artificial obstruction under this rule if it will increase the upstream elevation of the base flood 0.5 of a foot or as otherwise determined by the permit issuing authority or significantly increase flood velocities. (History: Sec. 76-5-208, MCA; IMP Sec. 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.605 PROHIBITED USES (1) The following artificial obstructions are prohibited within the designated floodway except as allowed by permit under ARM 36.15.602 through 36O15.604 and ARM 36.15.606:

(a) a building for living purposes or place of assembly or permanent use by human beings;

(b) a structure or excavation that will cause water to be diverted from the established floodway, cause erosion, obstruct the natural flow of water, or reduce the carrying capacity of the floodway;

(c) the construction or permanent storage of any object subject to floatation or movement during flood level periods.

(2) The following artificial obstructions are also prohibited within the designated floodway:

(a) mobile homes and manufactured homes;

(b) commercial buildings;

(c) solid and hazardous waste disposal and individual or multiple family sewage disposal systems;

(d) storage of toxic, flammable, hazardous, or explosive materials. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-403 and 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.606 PERMITS FOR FLOOD CONTROL WORKS (1) Since structural flood control works often significantly obstruct and affect floodway flow capacity, the following flood control measures shall be allowed within designated floodways subject to the issuance of a permit by the permit issuing authority and certification by a registered professional engineer of compliance with the conditions set forth in this rule:

(a) Flood control levees and floodwalls if:

(i) the proposed levees and floodwalls are designed and constructed to safely convey the base flood;

(ii) the cumulative effect of the levees and floodwalls combined with allowable flood fringe encroachments does not increase the unobstructed elevation of the base flood more than 0.5 of a foot at any point;

(b) riprap, except that which is hand placed, if:

(i) the riprap is designed to withstand the base flood;

(ii) the riprap does not increase the elevation of the base flood;

(iii) the riprap will not increase erosion upstream, downstream, or across stream from the riprap site;

(c) channelization projects if they do not significantly increase the magnitude, velocity, or elevation of the flood;

(d) dams provided that:

(i) they are designed and constructed in accordance with approved safety standards, and the Montana Dam Safety Act;

(ii) they will not increase flood hazards downstream either through operational procedures or improper hydrologic design.

(2) The permit issuing authority may establish either a lower or higher permissible increase in the elevation of the base flood than that established in subsection (1)(a)(ii) for individual levee projects based on consideration of the following criteria:

(a) the proposed levees and floodwalls, except those to protect agricultural land only, are constructed at least 3 feet higher than the elevation of the base flood;

(b) the estimated cumulative effect of other reasonably anticipated future permissible uses;

(c) the type and amount of existing flood prone development in the affected area;

(d) no detrimental impact occurs to existing or foreseeable development. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

NEXT PAGE IS 36-319

Sub-Chapter 7

Flood Fringe Minimum Standards

36.15.701 ALLOWED USES (1) All uses allowed in the designated floodway without a permit under ARM 36.15.601 shall also be allowed without a permit in the flood fringe.

(a) In addition, individual or multiple family subsurface sewage disposal systems are allowed only when they are reviewed and approved under laws and regulations administered by the department of health and environmental sciences or the local health board.

(2) All uses allowed in the designated floodway subject to the issuance of a permit under ARM 36.15.602 through 36.15.604 and ARM 36.15.606 shall also be allowed in the flood fringe subject to the issuance of a permit.

(3) In addition, structures including, but not limited to residential, commercial, and industrial structures, and suitable fill shall be allowed by permit from the permit issuing authority within the flood fringe subject to the following conditions and the requirements of ARM 36.15.702 and 36.15.901 through 36.15.903:

(a) Such structures or fill must not be prohibited by any other statute, regulation, ordinance, or resolution;

(b) Such structures or fill must be compatible with local comprehensive plans, if any;

(c) Roads, streets, highways, and rail lines shall be designed to minimize increases in flood heights. Where failure or interruption of transportation facilities would result in danger to the public health or safety, the facilities shall be located 2 feet above the elevation of the base flood;

(d) Public or private structures and facilities for liquid or solid waste treatment and disposal must be floodproofed to insure that no pollutants enter flood waters. These facilities must be allowed and approved under laws and standards administered by the department of health and environmental sciences prior to any approval given by the permit issuing authority; and

(e) Agricultural structures that have a low flood damage potential such as sheds, barns, shelters, and hay and grain storage structures must meet the requirements of ARM 36.15.602 ~9). (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-402, 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AND, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.702 FLOOD PROOFING FOR RESIDENTIAL INDUSTRIAL STRUCTURES (1) The new construction, substantial improvement, and alteration of residential structures shall meet the following conditions:

(a) Residential structures shall be constructed on suitable fill with a permanent foundation such that the lowest floor (including basement) level is 2 or more feet above the base flood elevation. The suitable fill shall be at a level no lower than the base flood elevation extending 15 feet at that elevation beyond the structure in all directions. Where existing streets, utilities, lot dimensions, or additions onto existing structures, make strict compliance with this provision impossible, the permit issuing authority may authorize a lesser amount of fill or alternative flood proofing measures. Alternative flood proofing measures must, at a minimum, meet the conditions of ARM 36.15.702 and ARM 36.15.901 through 36.15.903.

(i) The new placement of manufactured and mobile homes must be elevated on fill with a permanent foundation as prescribed for residential structures.

(ii) Replacement manufactured and mobile homes in an existing mobile home park or subdivision may, instead of using suitable fill, be elevated on a concrete or mortared block foundation, or other suitable permanent foundation, and anchored to prevent flotation or downstream movement.

(2) The new construction, substantial improvement, and alteration of commercial and industrial structures shall be elevated on fill as prescribed for residential structures in ARM 36.15.702(1) or flood proofed to a level no lower than 2 feet above the base flood elevation. Flood proofing shall be accomplished in accordance with ARM 36.15.901 through 36.15.903 and shall further include the following:

(a) If the structure is designed to allow internal flooding of the lowest floor, use of the floor shall be limited to such uses as parking, loading areas, and storage of equipment or materials not appreciably affected by flood water. Further, the floors and walls shall be designed and constructed of materials resistant to flooding up to an elevation of 2 or more feet above the elevation of the base flood. Structures designed to allow internal flooding shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the exit and entry of flood waters.

(b) Structures whose lowest floors are used for purposes other than parking, loading or storage of materials resistant to flooding shall be flood proofed up to an elevation no lower than 2 feet above the elevation of the base flood. Flood proofing shall include impermeable membranes or materials for floors and walls and watertight enclosures for all windows, doors, and other openings. These structures shall be designed to withstand the hydrostatic pressures and hydrodynamic forces resulting from the base flood.

(c) The new construction, substantial improvement and alteration of commercial or industrial structures floodproofed according to these requirements must be designed and flood proofing measures certified as adequate by a registered professional engineer or architect. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Effo 10/27/89.)

36.15.703 PROHIBITED USES The following artificial obstructions and nonconforming uses are prohibited within the flood fringe:

(1) solid and hazardous waste disposal; and

(2) storage of toxic, flammable, hazardous or explosive materials. Storage of petroleum products may be allowed by permit if stored on compacted fill at least 2 feet above the elevation of the base flood and anchored to a permanent foundation that is properly anchored to the ground. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-404 through 765-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

NEXT PAGE IS 36-327

Sub-Chapter 8

Designated Floodplain Only Minimum Standards

36.15.801 ALLOWED USES WHERE FLOODWAY NOT DESIGNATED OR NO FLOOD ELEVATIONS (1) For those watercourses or drainways in which there is a designated floodplain but not a designated floodway or where no flood elevations are available, all uses allowed in a designated floodway under ARM 36.15.601 without a permit shall also be allowed without a permit in such designated floodplain.

(2) All other uses within the designated floodplain shall require permits from the permit issuing authority. The following conditions insofar as each is applicable shall be attached to each permit approval:

(a) If the elevation of the base flood is available, residential structures must be built on compacted fill as specified in ARM 36.15.702(1). If such elevation is not available, the highest known historical flood elevation may be used to establish fill heights;

(b) If the elevation of the base flood is available, commercial and industrial structures must meet the flood proofing requirements set forth in ARM 36.15.702 (2). If such elevation is not available, the highest known historical flood elevation may be used to establish flood proofing heights;

(c) Proposed structures must be anchored to prevent flotation or collapse and must be located as far from stream channels as is practicable; and

(d) Sanitary sewage systems must be allowed and approved under laws and standards administered by the department of health and environmental sciences or the local health board.

(3) Where a proposed development within such designated floodplain may significantly increase flood velocities or depths, the permit issuing authority may require a permit applicant to furnish additional hydraulic and survey information before acting upon the permit application. This information may include, but is not limited to, any of the following:

(a) valley cross sections of the watercourse and adjoining floodplain;

(b) certification by a qualified professional engineer that floodproofing measures are reasonably adequate to protect against major flood damages; or

(c) a hydrologic study documenting probable effect on upstream or downstream property owners.

(4) Permits for such proposed developments may be modified or denied if the additional information shows that proposals would increase flood damages to other properties or would cause a threat to the health or safety of its occupants. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-402, 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

NEXT PAGE IS 36-331

Sub-Chapter 9

Flood Proofing Requirements

36.15.901 FLOOD PROOFING REQUIREMENTS FOR ELECTRICAL SYSTEMS (1) All electrical service materials, equipment, and installation for uses permitted with or without a permit in a designated floodplain or floodway shall conform to the following conditions:

(a) All incoming power service equipment including all metering equipment, control centers, transformers, distribution and lighting panels, and all other stationary equipment must be located at least 2 feet above the elevation of the base flood;

(b) Portable or movable electrical equipment may be placed below the elevation of the base flood provided that the equipment can be disconnected by a single plug-and-socket assembly of the submersible type;

(c) The main power service line shall have automatically operated electrical disconnect equipment or manually operated electrical disconnect equipment located at an accessible remote location outside the designated floodplain and above the elevation of the base flood; and

(d) All electrical wiring systems installed below the elevation of the base flood shall be suitable for continuous submergence and may not contain fibrous components. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-401 through 765-402, and Sec. 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

36.15.902 FLOODPROOFING REQUIREMENTS FOR HEATING SYSTEMS

(1) Heating systems for allowed and permitted floodplain and floodway uses shall conform to the following conditions:

(a) Float operated automatic control valves must be installed in supply lines to gas furnaces so that the fuel supply is automatically shut off when flood waters reach the floor level where the furnaces are located;

(b) Manually operated gate valves that can be operated from a location above the elevation of the base flood shall also be provided in gas supply lines; and

(c) Electric heating systems must be installed in accordance with ARM 36.15.901. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-401 through 76-5-402, and Sec. 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89-)

36.15.903 FLOOD PROOFING REQUIREMENTS FOR PLUMBING SYSTEMS (1) Plumbing systems for allowed and permitted floodplain and floodway uses shall conform to the following conditions:

(a) Sewer lines, except those to buried and sealed vaults, must have check valves installed to prevent sewage backup into permitted structures; and

(b) All toilet stools, sinks, urinals, and drains must be located such that the lowest point of possible water entry is at least 2 feet above the elevation of the base flood. (History: Sec. 76-5-208, MCA; IMP, Sec. 76-5-401 through 765-402, and Sec. 76-5-404 through 76-5-406, MCA; NEW, Eff. 9/4/74; AMD, 1989 MAR p. 1665, Eff. 10/27/89.)

NEXT PAGE IS 36-335

Montana
Model Floodplain Ordinance

CHAPTER 8

(revised 1/9/90)
(amended 2-25-91)

FLOODPLAIN AND FLOODWAY MANAGEMENT ORDINANCE

FOR COMMUNITIES WITH DESIGNATED FLOODWAYS

TABLE OF CONTENTS

Page

Intent 101

Statutory Authority 101

Adoption 101

I. Title and Purpose 102

II. Definitions 103

III. General Provisions 106

3.01 Jurisdictional Area 106
3.02 Floodplain District Establishment 106
3.03 Floodplain Administrator 106
3.04 Rule for Interpretation of Floodplain District Boundaries 106
3.05 Compliance 106
3.06 Abrogation and Greater Responsibility. 106
3.07 Regulation Interpretation. 106
3.08 Warning and Disclaimer of Liability 107
3.09 Severability 107
3.10 Disclosure Provision 107

IV. Administration 108

4.01 Administration 108
4.02 Permit Applications 109
4.03 Emergency Waiver 110
4.04 Review - Variance - Appeals 111
4.05 Fees 112
4.06 Violation Notice 112
4.07 Compliance 112
4.08 Penalties 112
4.09 Emergency Preparedness Planning 112

V. Specific Standards 113

5.01 Applications 113

5.02 Floodway 113
  A. Uses Allowed Without Permits 113
  B. Uses Requiring Permits 113
  C. Permits for Flood Control Works 115
  D. Permits for Water Diversions 116
  E. Prohibited Uses 116

5.03 Floodway Fringe 117
  A. Uses Allowed Without Permits 117
  B. Uses Requiring Permits 117
  C. Prohibited Uses 118

5.04 Floodplain Areas with Flood Elevations and No Delineated Floodway 118

5.05 Shallow Flooding (AO Zones) 119

VI. General Standards 120

6.01 Applications 120
  A. Uses Allowed Without Permits 120
  B. Uses Requiring Permits 120
  C. Prohibited Uses 120
  D. Floodplain Boundary Interpretation 120

VII. Flood-proofing Requirements 121

7.01 Certification 121

7.02 Conformance 121
  A. Electrical Systems 121
  B. Heating Systems 121
  C. Plumbing Systems 121

Intent

This (Resolution/Ordinance) is passed in order to comply with the Montana Floodplain and Floodway Management Act (Title 76, Chapter 5, MCA) and to ensure compliance with the requirements for the continued participation by ____

(City, Town, or County Name)

in the National Flood Insurance Program. Land-use regulations which are hereby adopted are to be applied to all identified 100-year floodplains within local jurisdiction and are attached as Appendix A.

Statutory Authority

Municipalities have authority to adopt ordinances as provided for in §7-1-4123, MCA to promote the general public health and welfare.

Other authority for municipalities and counties to adopt floodplain management regulations appears in §76-5-101 through 406, MCA.

Adoption

This (Resolution/Ordinance) adopts the set of comprehensive land-use regulations attached as Appendix A for identified 100-year floodplains within ______________________________

(City, Town, or County Name)

Identification of 100-year floodplains is based on the ______________________________ Flood Insurance Study, dated ____________________. All other (resolutions/ordinances) are hereby repealed to the extent of any inconsistencies.

APPENDIX A

CHAPTER I
TITLE AND PURPOSE

1.01 Title

These regulations shall be known and cited as ______________________ Floodplain Regulations.
(City, Town, or County Name)

These regulations are in accordance with exercising the authority of the laws of the State of Montana.

1.02 Purpose

To promote the public health, safety, and general welfare, to minimize flood losses in areas subject to flood hazards, and to promote wise use of the floodplain. These regulations have been established with the following purposes intended:

A. To guide development of the 100-year floodplain within local jurisdiction consistent with the enumerated findings by:

  1. recognizing the right and need of water courses to periodically carry more than the normal flow of water;

  2. participating in coordinated efforts of federal, state, and local management activities for 100-year floodplains; and

  3. ensuring the regulations and minimum standards adopted, insofar as possible, balance the greatest public good with the least private injury.

B. Specifically it is the purpose of these regulations to:

  1. restrict or prohibit uses that are dangerous to health, safety, and property in times of flood, or that cause increased flood heights and velocities;

  2. require that uses vulnerable to floods, including public facilities, be provided with flood protection at the time of initial construction;

  3. identify lands unsuitable for certain development purposes because of flood hazards;

  4. minimize the need for rescue and relief efforts associated with flooding undertaken at the expense of the general public;

  5. ensure potential buyers are notified that property is within a 100-year floodplain and subject to the provisions of these regulations; and

  6. ensure that those who occupy 100-year floodplains assume responsibility for their actions.

CHAPTER II
DEFINITIONS

2.01 Definitions

Unless specifically defined below, words or phrases used in these regulations shall be interpreted to give them the meaning they have in common usage and to give these regulations the most reasonable application.

Act — Montana Floodplain and Floodway Management Act, §76-5-101 through 406, MCA.

Alteration — Any change or addition to a structure that either increases its external dimensions or increases its potential flood hazard.

Appeal — A request for a review of the Floodplain Administrator's interpretation of any provisions of these regulations or a request for a variance.

Area of Special Flood Hazard — The land in the floodplain within the community subject to inundation by a one percent (1%) or greater chance of flooding in any given year, i.e., the 100-year floodplain.

Artificial Obstruction - Development — Any obstruction which is not natural and includes any dam, diversion, wall, riprap, embankment, levee, dike, pile, abutment, projection, revetment, excavation, channel rectification, bridge, conduit, culvert, building, refuse, automobile body, fill, or other analogous structure or matter in, along, across, or projecting into any 100-year floodplain which may impede, retard, or alter the pattern of flow of water, either in itself or by catching or collecting debris carried by the water, or that is placed where the natural flow of water would carry the same downstream to the damage or detriment of either life or property.

Base Flood — A flood having a one percent (1%) chance of being equalled or exceeded in any given year. A base flood is the same as a 100-year flood.

Base Flood Elevation — The elevation above sea level of the base flood in relation to National Geodetic Vertical Datum of 1929 unless otherwise specified in the flood hazard study.

Channelization Project — The excavation and/or construction of an artificial channel for the purpose of diverting the entire flow of a stream from its established course.

Establish — To construct, place, insert, or excavate.

Existing Manufactured Home Park or Subdivision — A manufactured home park or subdivision where the construction of facilities for servicing the manufactured homes lots is completed before the effective date of the floodplain management regulations. This includes, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

FEMA — The Federal Emergency Management Agency

Flood or Flooding — A general and temporary condition of partial or complete inundation of normally dry lands from the overflow of a stream, or the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Insurance Rate Map — The map on which FEMA has delineated both the 100 year floodplains and the risk premium zones.

Flood Insurance Study — The report in which FEMA has provided flood profiles, as well as the Flood Boundary/Floodway Map and the water surface profiles.

Floodplain — The areas subject to these regulations, generally adjoining a stream, that would be covered by floodwater of a base flood except for designated shallow flooding areas that receive less than one foot of water per occurrence. The floodplain consists of a floodway and floodway fringe.

Floodway — The channel of a stream and the adjacent overbank areas that must be reserved in order to discharge a base flood without cumulatively increasing the water surface elevation more than one-half (1/2) foot.

Floodway Fringe — That portion of the floodplain outside the limits of the floodway.

Levee — A man-made embankment, usually earthen, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water to provide protection from temporary flooding.

Levee System — A flood protection system that consists of a levee, or levees, and associated structures, such as drainage and closure devices, which are constructed and operated in accordance with sound engineering practices.

Lowest Floor — Any floor used for living purposes, storage, or recreation. This includes any floor that could be converted to such a use.

Manufactured Home — A structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. This does not include "recreational vehicles."

Manufactured Home Park or Subdivision — A parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

Mean Sea Level — The National Geodetic Vertical Datum (NGVD) of 1929 or other datum to which base flood elevations are referenced.

New Construction — Structures for which construction, substantial improvement, or alteration commences on or after the effective date of these regulations.

Official Floodplain Maps — The Flood Insurance Rate Maps and Flood Boundary\Floodway Maps provided by FEMA for ______________________________, dated ____________.
(City, Town or County Name)

Permit Issuing Authority — ______________________________.
(City/Town Council/County Commissioners)

Recreational Vehicle — A vehicle which is (1) built on a single chassis; (2) 400 square feet or less when measured at the largest horizontal projections; (3) designed to be self-propelled or permanently towable by a light duty truck; and (4) designed primarily for use as temporary living quarters for recreation, camping, travel, or seasonal use, not for use as a permanent dwelling.

Riprap — Stone, rocks, concrete blocks, or analogous material that is placed along the banks or bed of a stream to alleviate erosion.

Start of Construction — Commencement of clearing, grading, filling, or excavating to prepare a site for construction.

Structure — A walled and roofed building, manufactured home, a gas or liquid storage tank, bridge, culvert, dam, diversion, wall, revetment, dike, or other projection that may impede, retard, or alter the pattern of flow of water.

Substantial Damage — Damage sustained by a structure where the cost of restoring the structure to its condition before damage would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement — Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure either:

(a) before the improvement or repair is started, or
(b) if the structure has been damaged, and is being restored, before the damage occurred. For the purposes of this definition, substantial improvement is considered to occur when the first construction to any wall, ceiling, floor, or other structural part of the building commences. The term does not include:
  (i) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
  (ii) any alteration of a structure listed on the national register of historic places or state inventory of historic places.

Suitable Fill — Fill material which is stable, compacted, well graded, pervious, generally unaffected by water and frost, devoid of trash or similar foreign matter, devoid of tree stumps or other organic material, and is fitting for the purpose of supporting the intended use and/or permanent structure.

Variance — A grant of relief from the requirements of these regulations that would permit construction in a manner otherwise prohibited by these regulations.

Violation — The failure of a structure or other development to be fully compliant with these regulations. A structure or other development without elevation certificate, certification by a licensed engineer or architect of compliance with these regulations, or other evidence of compliance is presumed to be in violation until such time as documentation is provided.

100-Year Flood — A flood having a one percent (1%) chance of being equalled or exceeded in any given year. A 100-year flood has nearly a 23 percent chance of occurring in a 25-year period. A 100-year flood is the same as a base flood.

CHAPTER III
GENERAL PROVISIONS

3.01 Jurisdictional Area

These regulations shall apply to all lands within the jurisdiction of ______________________________.
(City, Town or County Name)
Stateof Montana, shown on the Official Floodplain Maps as being located within a 100-year floodplain district.

3.02 Floodplain District Establishment

The floodplain districts established are defined by the base flood elevations and 100-year floodplains as delineated in the Flood Insurance Study. The basis for the Flood Insurance Study is a scientific and engineering report entitled, "The Flood Insurance Study for ________________, Montana," dated __________________, with accompanying Flood Insurance Rate Maps and Flood Boundary/ Floodway Maps. The Official Floodplain Maps and Study are on file in the office of the Floodplain Administrator.

3.03 Floodplain Administrator

The ________________________________ Floodplain Administrator
(City, Town, or County Name)
has been designated to be the ________________________________.
(Title of Floodplain Administrator)
The responsibilities of this position are outlined in Chapter IV of these regulations.

3.04 Rules for Interpretation of Floodplain District Boundaries

The boundaries of the 100-year floodway shall be determined by scaling distances on the official floodplain maps and using the floodway data table contained in the flood insurance study report. The maps may be used as a guide for determining the 100-year floodplain boundary, but the exact location of the floodplain boundary shall be determined where the base flood elevation intersects the natural ground. For unnumbered A Zones and AO Zone floodplains, where there is a conflict between a mapped floodplain boundary and actual field conditions, the Floodplain Administrator may interpret the location of the 100-year floodplain boundary based on field conditions or available historical flood information.

3.05 Compliance

No structure or land use shall be located, extended, converted, or structurally altered without full compliance with the provisions of these regulations and other applicable regulations. These regulations meet the minimum floodplain development requirements as set forth by the Montana Board of Natural Resources and Conservation and the National Flood Insurance Program.

3.06 Abrogation and Greater Responsibility

It is not intended by these regulations to repeal, abrogate, or impair any existing easements, covenants, deed restrictions, or underlying zoning. However, where these regulations impose greater restrictions, the provisions of these regulations shall prevail.

3.07 Regulation Interpretation

The interpretation and application of the provisions of these regulations shall be considered minimum requirements and liberally construed in favor of the governing body and not deemed a limitation or repeal of any other powers granted by State statute.

3.08 Warning and Disclaimer of Liability

These regulations do not imply that areas outside the delineated floodplain boundaries or permitted land uses will always be totally free from flooding or flood damages. these regulations shall not create a liability or cause of action against ________________________________,
(City, Town, or County Name)
or any officer or employee thereof for flood damages that may result from reliance upon these regulations.

3.09 Severability

If any section, clause, provision, or portion of these regulations is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of these regulations shall not be affected thereby.

3.10 Disclosure Provision

All owners of property in an identified 100-year floodplain as indicated on the Official Floodplain Maps must notify potential buyers or their agents that such property is subject to the provisions of these regulations.

CHAPTER IV
ADMINISTRATION

4.01 Administration

A. As provided in Section 3.03 of these regulations, the Floodplain Administrator has been designated by the ________________________________, and has the responsibility of such position as outlined
(City/Town Council/County Commissioner)
in these regulations.

B. The Floodplain Administrator is hereby appointed with the authority to review floodplain development permit applications, proposed uses, and construction to determine compliance with these regulations. The Floodplain Administrator is required to assure all necessary permits have been received from those governmental agencies from which approval is required by federal and state law and local codes, including Section 404 of the Federal Water Pollution Control Act of 1972, 33 U.S.C. 1334, and under the provisions of the Natural Streambed and Land Preservation Act.

1. Additional Factors — Floodplain development permits shall be granted or denied by the Floodplain Administrator on the basis of whether the proposed establishment, alteration, or substantial improvement of an artificial obstruction meets the requirements of these regulations. Additional factors that shall be considered for every permit application are:

    a. the danger to life and property due to increased flood heights, increased flood water velocities, or alterations in the pattern of flood flow caused by encroachments;

    b. the danger that materials may be swept onto other lands or downstream to the injury of others;

    c. the proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions;

    d. the susceptibility of the proposed facility and its contents to flood damage and the effects of such damage on the individual owner;

    e. the importance of the services provided by the facility to the community;

    f. the requirement of the facility for a waterfront location;

    g. the availability of alternative locations not subject to flooding for the proposed use;

    h. the compatibility of the proposed use with existing development and anticipated development in the foreseeable future;

    i. the relationship of the proposed use to the comprehensive plan and floodplain management program for the area;

    j. the safety of access to property in times of flooding for ordinary and emergency services; and

    k. such other factors as are in harmony with the purposes of these regulations, the Montana Floodplain and Floodway Management Act, and the National Flood Insurance Program.

C. A floodplain development permit application is considered to have been automatically granted 60 days after the date of receipt of the application by the Floodplain Administrator unless the applicant has been notified that the permit is denied, conditionally approved, or additional information pertinent to the permit review process is required.

D. The Floodplain Administrator shall adopt such administrative procedures as may be necessary to efficiently administer the provision of these regulations.

E. The Floodplain Administrator shall maintain such files and records as may be necessary to document nonconforming uses, base flood elevations, floodproofing and elevation certifications, fee receipts, the issuance of permits, agenda, minutes, records of public meetings, and any other matters related to floodplain management in ______________________________. Such files and records
(City, Town, or County)
shall be open for public inspection. In matters of litigation, the ______________________________
(City, Town, or County)
attorney may restrict access to specific records.

F. The floodplain administrator may require whatever additional information is necessary to determine whether the proposed activity meets the reqirements of these regulations. Additional information may include hydraulic calculations assessing the impact on base flood elevations or velocities; level survey; or certification by a registered land surveyor, professional engineer, or licensed architect that the requirements of these regulations are satisfied.

G. Upon receipt of an application for a permit or a variance, the Floodplain Administrator shall prepare a notice containing the facts pertinent to the application and shall publish the notice at least once in a newspaper of general circulation in the area. Notice shall also be served by first-class mail upon adjacent property owners and the DNRC Floodplain Management Section. The notice shall provide a reasonable period of time, not less than 15 days, for interested parties to submit comments on the proposed activity.

H. Copies of all permits granted must be sent to the Department of Natural Resources and Conservation in Helena, Montana.

I. In riverine situations, notification by the Floodplain Administrator must be made to adjacent communities, the Floodplain Management Section (DNRC), and FEMA prior to any alteration or relocation of a stream. The flood-carrying capacity within the altered or relocated portion of any stream must be maintained. Erosion control measures shall be incorporated to ensure stability of altered channels and stream banks.

4.02 Permit Applications

A. Activities or uses that require the issuance of a permit, including the expansion or alteration of such uses, shall not be initiated, established, or undertaken until a permit has been issued by the Floodplain Administrator.

B. Permit applicants shall be required to furnish the following information as deemed necessary by the Floodplain Administrator for determining the suitability of the particular site for the proposed use.

1. Plans in duplicate drawn to scale (including dimensions) showing the nature, location, and elevation of the lot; existing and proposed structure locations; fill, storage, or materials site; flood-proofing measures; mean sea level elevation of first floor of proposed structures; and location of the channel.

2. A plan view of the proposed development indicating external dimensions of structures, street or road finished grade elevations, well locations, individual sewage treatment and disposal sites, excavation and/or fill quantity estimates, and site plan and/or construction plans.
3. Specifications for flood-proofing, filling, excavating, grading, riprapping, storage of materials, and location of utilities.

4. A professional engineer's or registered architect's design calculations and certification that the proposed activity has been designed to be in compliance with these regulations.

5. Certification of flood-proofing and/or elevation shall be provided on a standard form available from the floodplain administrator.

C. To determine that the permit specifications and conditions have been completed, applicants who have received permits are required to furnish the following at the time of an on-site conformance inspection.

1. Certification by a registered professional engineer or licensed land surveyor of the actual mean sea level elevation of the lowest floor (including basement) of all new, altered, or substantially improved buildings.

2. If flood-proofing techniques were used for buildings, the mean sea level elevation to which the flood proofing was accomplished must be certified by a structural engineer or licensed architect in the same manner.

3. Certification shall also be required, for artificial obstructions other than buildings, that the activity was accomplished in accordance with these regulations and the design plans submitted with the application for the permit activity. This certification may be waived by the floodplain administrator if it can be clearly ascertained by a site inspection that the activity was accomplished in accordance with these regulations.

4. Certification of flood-proofing and/or elevation shall be provided on a standard form available from the floodplain administrator.

4.03 Emergency Waiver

A. Emergency repair and replacement of severely damaged public transportation facilities, public water and sewer facilities, and flood control works may be authorized. Floodplain development permit requirements may be waived if:

1. Upon notification and prior to the emergency repair and/or replacement, the Floodplain Administrator determines that an emergency condition exists warranting immediate action; and

2. The Floodplain Administrator agrees upon the nature and type of proposed emergency repair and/or replacement.

B. Authorization to undertake emergency repair and replacement work may be given verbally if the Floodplain Administrator feels that such a written authorization would unduly delay the emergency works. Such verbal authorization must be followed by a written authorization describing the emergency condition, and the type of emergency work agreed upon, and stating that a verbal authorization had been previously given.

4.04 Review-Variances-Appeals

A. There is hereby created a local Floodplain Management Board of Adjustment, the membership, administration, and rules of procedure of which are identical to a zoning board of adjustment.

B. The Board of Adjustment may, by variance, grant a permit that is not in compliance with the minimum standards contained in these regulations according to the following procedures:

1. Variances shall not be issued for areas within a floodway if any additional increase in flood elevations or velocities after allowable encroachments into the floodway fringe would result;

2. Variances shall only be issued upon:

    a. a showing of good and sufficient cause;

    b. a determination that refusal of a permit due to exceptional circumstances would cause a unique or undue hardship on the applicant or community involved;

    c. a determination that the granting of a variance will not result in increased flood hazards, present additional threats to public safety, be an extraordinary public expense, create nuisances, cause fraud, victimize the public, or conflict with existing state and local laws;

    d. a determination that the proposed use would be adequately flood-proofed;

    e. a determination that a reasonable alternate location outside the floodplain is not available;

    f. a determination that the variance requested is the minimum necessary to afford relief, considering the flood hazard; and

    g. approval of the Montana Department of Natural Resources and Conservation, upon request from the Permit Issuing Authority, prior to formally approving any permit application that is in variance to these regulations.

3. Variances shall be issued in writing from the Permit Issuing Authority and shall notify the applicant that:

    a. a specific variance is granted, and certain conditions may be attached;

    b. the issuance of a variance to construct a building below the 100-year floodplain elevation will result in increased premium rates; and

    c. such construction below the 100-year flood elevation increases risks to life and property. The Floodplain Administrator shall maintain records of the variance notification and actions, including justification for their issuance, and forward copies of all variance actions to the Montana Department of Natural Resources and Conservation and the Federal Emergency Management Agency.

C. Appeal of any decision of the Permit Issuing Authority, its officers, or agencies may be taken by an aggrieved person or persons, jointly or separately, to a court of record.

4.05 **Fees**

A processing fee of ______________ shall be submitted with each permit application.

4.06 **Violation Notice**

The Floodplain Administrator shall bring any violation of these regulations to the attention of the local governing body; its legal council; and and the Montana Department of Natural Resources and Conservation.

4.07 **Compliance**

Any use, arrangement, or construction not in compliance as authorized by permit, shall be deemed a violation of these regulations and punishable as provided in Section 4.08. An applicant is required to submit certification by a registered professional engineer, architect, land surveyor, or other qualified person designated by the Floodplain Administrator that finished fill and lowest building floor elevations, flood proofing, hydraulic design, or other flood protection measures were accomplished in compliance with these regulations.

4.08 **Penalties**

Violation of the provisions of these regulations or failure to comply with any of the requirements, including permit approval prior to development of flood prone lands and conditions and safeguards established shall constitute a misdemeanor. Any person who violates these regulations or fails to comply with any of its requirements shall, upon conviction, be fined not more than $100 or imprisoned in jail for not more than 10 days or both. Each day's continuance of a violation shall be deemed a separate and distinct offense.

4.09 **Emergency Preparedness Planning**

In formulating community development goals, the community shall consider the development of a plan for evacuating residents of all manufactured home parks or subdivisions located within flood prone areas. This plan should be developed, filed with, and approved by appropriate community emergency management authorities.

CHAPTER V
SPECIFIC STANDARDS

5.01 Applications

The minimum floodplain development standards listed in this chapter apply to the floodway and floodway fringe portions of the 100-year floodplain as delineated on the Flood Hazard Area Maps.

5.02 Floodway

A. Uses Allowed Without Permits. The following open-space uses shall be allowed without a permit within the floodway, provided that such uses conform to the provisions of Chapter VII of these regulations; are not prohibited by any other ordinance, resolution, or statute; and do not require fill, excavation, permanent storage of materials, or equipment or structures other than portable structures:

1. Agricultural uses;
2. Accessory uses such as loading and parking areas, or emergency landing strips associated with industrial and commercial facilities;
3. Private and public recreational uses such as golf courses, driving ranges, archery ranges, picnic grounds, boat-launching ramps, parks, wildlife management and natural areas, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, and hiking or horseback riding trails;
4. Forestry, including processing of forest products with portable equipment;
5. Residential uses such as lawns, gardens, parking areas, and play areas;
6. Irrigation and livestock supply wells, provided that they are located at least 500 feet from domestic water supply wells;
7. Fences, except permanent fences crossing channels; and
8. Recreational vehicles provided that they be on the site for fewer than 180 consecutive days, or be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system with wheels intact, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

B. Uses Requiring Permits. The following artificial obstructions may be permitted in the floodway subject to the issuance of a permit by the Floodplain Administrator:

1. Excavation of material from pits and pools provided that:
    a. a buffer strip of undisturbed land is left between the edge of the channel and the edge of the excavation. This buffer strip must be of sufficient width to prevent flood flows from channeling into the excavation;
    b. the excavation meets all applicable laws and regulations of other local and state agencies; and
    c. excavated material is disposed of or stockpiled outside the floodway.

2. Railroad, highway, and street stream crossings provided the crossings are designed to offer minimal obstruction to flood flow. Stream crossings shall not increase the elevation of the 100-year flood more than one-half foot nor cause a significant increase in flood velocities.

3. Limited filling for highway, street, and railroad embankments not associated with stream crossings, provided that:

   a. reasonable alternate transportation routes outside the designated floodway are not available; and

   b. such floodway encroachment is located as far from the stream channel as possible and shall not result in a cumulative increase in base flood elevations, after allowable encroachments into the floodway fringe, exceeding one-half foot.

4. Buried or suspended utility transmission lines, provided that:

   a. suspended utility transmission lines are designed so the lowest point of the suspended line is at least 6 feet higher than the base flood elevation;
   b. towers and other appurtenant structures are designed and placed to withstand and minimally obstruct flood flows; and

   c. utility transmission lines carrying toxic or flammable materials are buried to a depth of at least twice the calculated maximum depth of scour for a 100-year flood. The maximum depth of scour shall be determined by hydraulic engineering methods acceptable to the Floodplain Administrator.

5. Storage of materials and equipment, provided that:

   a. the material or equipment is not subject to major damage by flooding and is properly anchored to prevent floatation or downstream movement; or

   b. the material or equipment is readily movable within the limited time available after flood warning. Storage of flammable, toxic, hazardous, or explosive materials shall not be permitted.

6. Domestic water supply wells, provided that:

   a. they are driven or drilled wells located on ground higher than the surrounding ground to assure positive drainage from the well;

   b. well casings are water tight to a distance of at least 25 feet below the ground surface;

   c. water supply and electrical lines have a watertight seal where the lines enter the casing;

   d. all pumps, electrical lines, and equipment are either submersible or adequately floodproofed; and

   e. check valves are installed on main water lines at wells and at all building entry locations.

7. Buried and sealed vaults for sewage disposal in recreational areas, provided they meet applicable laws and standards administered by the Montana Department of Health and Environmental Sciences.

8. Public or private campgrounds, provided that:

   a. access roads require only limited fill and do not obstruct or divert flood waters; and

   b. recreational vehicles and travel trailers are licensed and ready for highway use. They are ready for highway use if on wheels or jacking system with wheels intact, are attached to the site with only quick disconnect type utilities and securing devices, and have no permanently attached additions.

9. Structures accessory to the uses permitted in this section such as boat docks, marinas, sheds, picnic shelters, tables, and toilets provided that:

   a. the structures are not intended for human habitation;

   b. the structures will have a low flood damage potential;

   c. the structures will, insofar as possible, be located on ground higher than the surrounding ground and as far from the channel as possible;

   d. the flood-proofing standards of Chapter VII are met; and

   e. the structures will be constructed and placed so as to offer minimal obstruction to flood flows and are anchored to prevent floatation.

10. Substantial improvements to any structure provided that the provisions of Section 5.03-B.3, 5.03-B.4, or 5.03-B.5 of these regulations are met. In the floodway the structure must be floodproofed or elevated on a permanent foundation rather than on fill.

11. All other artificial obstructions, substantial improvements, or non-conforming uses not specifically listed or prohibited by these regulations.

C. Permits for Flood Control Works. Flood control works shall be allowed within floodways subject to the issuance of a permit by the Floodplain Administrator with the following conditions:

1. Levees and floodwalls are permitted if:

   a. the proposed levee or floodwall is designed and constructed to safely convey a 100-year flood; and

   b. the cumulative effect of the levee or floodwall combined with allowable floodway fringe encroachments does not increase the unobstructed base flood elevation more than 0.5 foot. The Floodplain Administrator may establish either a lower or higher permissible increase in the base flood elevation for individual levee projects only with concurrence from the Montana Department of Natural Resources and Conservation and the Federal Emergency Management Agency based upon consideration of the following criteria:

      1) the estimated cumulative effect of any anticipated future permissible uses; and

      2) the type and amount of existing flood-prone development in the affected area.

   c. the proposed levee or floodwall, except those to protect agricultural land, are constructed at least 3 feet higher than the base flood elevation.

2. Riprap, except that which is hand-placed, if:
   a. the riprap is designed to withstand a 100-year flood;
   b. the riprap does not increase the base flood elevation; and
   c. the riprap will not increase erosion upstream, downstream, or adjacent to the riprap site.
3. Channelization projects if they do not significantly increase the magnitude, velocity, or base flood elevation in the proximity of the project.
4. Dams, provided that:
   a. they are designed and constructed in accordance with the Montana Dam Safety Act and applicable safety standards; and
   b. they will not increase flood hazards downstream, either through operational procedures or improper hydrologic/hydraulic design.

D. Permits for Water Diversions. Permits for the establishment of a water diversion or change in place of diversion shall not be issued if, in the judgment of the Floodplain Administrator:

1. the proposed diversion will significantly increase the upstream base flood elevation to the detriment of neighboring property;
2. the proposed diversion is not designed and constructed to minimize potential erosion from a 100-year flood; and
3. any permanent diversion structure crossing the full width of the stream channel is not designed and constructed to safely withstand a 100-year flood.

E. Prohibited Uses. The following artificial obstructions and non-conforming uses are prohibited within the floodway:

1. New construction of any residential, commercial, or industrial structure;
2. Encroachments including fill, new construction, alterations, substantial improvements, and other development within the adopted regulatory floodway that would result in erosion of the embankment, obstruction of the natural flow of waters, or increase in flood levels within the community during the occurrence of the 100-year flood;
3. The construction or permanent storage of an object subject to floatation or movement during flooding;
4. Solid and hazardous waste disposal, sewage treatment, and sewage disposal systems;
5. Storage of toxic, flammable, hazardous, or explosive materials; and
6. Alterations of structures unless it can be shown the alteration won't raise flood heights;
7. Manufactured homes.

5.03 Floodway Fringe

A. Uses Allowed Without Permits. All uses allowed in the floodway, according to the provisions of Section 5.02 A of these regulations, shall also be allowed without a permit in the floodway fringe. In addition, individual or multiple family subsurface sewage disposal systems are allowed only when they are reviewed and approved under laws and regulations administered by the Department of Health and Environmental Sciences or the local health board.

B. Uses Requiring Permits. All uses allowed in the floodway subject to the issuance of a permit, according to the provisions of Section 5.02 B, C, and D of these regulations, shall also be allowed by permit within the floodway fringe. In addition, new construction, substantial improvements, and alterations to structures are allowed by permit. This includes but is not limited to residential, commercial, and industrial construction and suitable fill to be allowed by permit from the Floodplain Administrator, subject to the following conditions:

1. Such structures or fill must not be prohibited by any other statute, regulation, ordinance, or resolution;

2. Such structures or fill must be compatible with local comprehensive plans;

3. The new construction, alterations, and substantial improvements of residential structures including manufactured homes must be constructed on suitable fill such that the lowest floor elevation (including basement) is two feet or more above the base flood elevation. The suitable fill shall be at an elevation no lower than the base flood elevation and shall extend for at least fifteen feet, at that elevation, beyond the structure(s) in all directions;

4. The new construction, alteration, and substantial improvement of commercial and industrial structures can be constructed on suitable fill as specified in Section 5.03-B.3 of these regulations. If not constructed on fill, commercial and industrial structures must be adequately flood-proofed to an elevation no lower than two feet above the base flood elevation. Flood-proofing must be certified by a registered professional engineer or architect that the flood-proofing methods are adequate to withstand the flood depths, hydrodynamic and hydrostatic pressures, velocities, impact, buoyancy, and uplift forces associated with the 100-year flood.

    a. If the structure is designed to allow internal flooding of areas below the lowest floor, use of this space shall be limited to parking, loading areas, building access, and storage of equipment or materials not appreciably affected by flood waters. The floors and walls shall be designed and constructed of materials resistant to flooding to an elevation no lower than two feet above the base flood elevation. Walls shall be designed to automatically equalize hydrostatic forces by allowing for entry and exit of floodwaters. Openings may be equipped with screens, louvres, valves, other coverings, or devices which permit the automatic entry and exit of floodwaters.

    b. Structures whose lowest floors are used for a purpose other than parking, loading, or storage of materials resistant to flooding shall be flood-proofed to an elevation no lower than two feet above the base flood elevation. Flood-proofing shall include impermeable membranes or materials for floors and walls and watertight enclosures for all windows, doors, and other openings. These structures shall also be designed to withstand the hydrostatic, hydrodynamic, and buoyancy effects of a 100-year flood.

    c. Flood-proofing of electrical, heating, and plumbing systems shall be accomplished in accordance with Chapter VII of these regulations.

5. All manufactured homes placed in the floodway fringe must have the chassis securely anchored to a foundation system that will resist floatation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, over-the-top or frame ties to ground anchors. The following conditions also apply;

   a. When a manufactured home is 1) altered, 2) replaced because of substantial damage as a result of a flood, or 3) replaced on an individual site, the lowest floor must be elevated two feet above the base flood elevation. The home can be elevated on fill or raised on a permanent foundation of reinforced concrete, reinforced mortared block, reinforced piers, or other foundation elements of at least equivalent strength.

   b. Replacement or substantial improvement of manufactured homes in an existing manufactured home park or subdivision must be raised on a permanent foundation. The lowest floor must be two feet above the base flood elevation. The foundation must consist of reinforced concrete, reinforced mortared block, reinforced piers, or other foundation elements of at least equivalent strength.

   c. Manufactured homes proposed for use as commercial or industrial structures must be elevated and anchored, rather than flood-proofed;

6. Fill material placed in the floodway fringe must be stable, compacted, well graded, pervious, generally unaffected by water and frost, devoid of trash or similar foreign matter, devoid of tree stumps or other organic material, and appropriate for the purpose of supporting the intended use and/or permanent structure.

7. Roads, streets, highways, and rail lines shall be designed to minimize increase in flood heights. Where failure or interruption of transportation facilities would result in danger to the public health or safety, the facility shall be located two feet above the base flood elevation;

8. Agricultural structures that have a low damage potential, such as sheds, barns, shelters, and hay or grain storage structures must be adequately anchored to prevent floatation or collapse and all electrical facilities shall be placed above the base flood elevation; and

9. Recreational vehicles, if they are on the site for more than 180 consecutive days or are not ready for highway use, must meet the elevating requirements of Section 5.03-B.3.

C. Prohibited Uses. The following artificial obstructions and non-conforming uses are prohibited within the floodway fringe:

1. Solid and hazardous waste disposal; and

2. Storage of highly toxic, flammable, hazardous, or explosive materials. Storage of petroleum products may be allowed by permit if stored on compacted fill at least two feet above the base flood elevation and anchored to a permanent foundation to prevent downstream movement.

5.04 Floodplain Areas with Flood Elevations and No Delineated Floodway

A. A development proposed for a 100-year floodplain, where water surface elevations are available but no floodway is delineated, may not significantly increase flood velocities or depths or generally alter patterns of flood flow. The provisions of Section 5.03, Floodway Fringe, shall apply to these areas. The Floodplain Administrator may require a permit applicant to furnish additional hydraulic data before acting on a permit application for such a floodplain. The data may include, but are not limited to, any of the following:

1. a hydraulic study documenting probable effect on upstream, downstream, or adjacent property owners caused by the proposed development; or

2. the calculated increase in the 100-year flood water surface profile caused by the proposed development.

B. Permits for such proposed development may be modified or denied if the additional information shows that the proposed use would cause an additional flood hazard to adjacent property or significantly increase flood heights. A significant increase in flood heights is one-half foot unless existing or anticipated development in the area dictates a lesser amount of allowable increase.

5.05 Shallow Flooding (AO Zones)

A. Shallow flooding areas are delineated as AO Zone floodplains on the Flood Insurance Rate Maps. The provisions of Section 5.03, Floodway Fringe, of these regulations shall apply to any AO Zone floodplains. The depth of the 100-year flood is indicated as the depth number on the Flood Insurance Rate Maps. The 100-year flood depth shall be referenced to the highest adjacent grade or stream flow line in determining which fill or flood-proofing heights to use in applying the provisions of Section 5.03-B.3 and Section 5.03-B.4 of these regulations. In the absence of depth or elevation information, a minimum 2 foot flood depth shall be used.

B. Floodplain Boundary Interpretation. The Floodplain Administrator shall make interpretations where needed as to the exact location of an AO Zone floodplain boundary when there is a conflict between a mapped boundary and actual field conditions.

CHAPTER VI
GENERAL STANDARDS

6.01 Applications

The minimum floodplain development standards listed in this chapter apply to the 100-year floodplains delineated by approximate methods and identified as unnumbered A Zones on the Flood Insurance Rate Maps.

A. Uses Allowed Without Permits. All uses allowed in a floodway, according to the provisions of Section 5.02-A of these regulations, shall also be allowed without a permit in unnumbered A-Zone floodplains.

B. Uses Requiring Permits. All uses allowed in the floodway and floodway fringe subject to the issuance of a permit, according to the provisions of Section 5.03-B, shall require permits from the Floodplain Administrator for unnumbered A-Zone floodplains. Also, the provisions of Section 5.03-B apply to the A-Zone floodplains with no floodway delineated or water surface profile computed. Since there are no 100-year flood water surface profiles computed for A-Zone floodplains, the following conditions also apply:

1. Elevation data on the 100-year flood shall be provided for subdivision proposals according to the definitions and rules of the Montana Sanitation in Subdivisions Act, MCA 76-4 Part 1 and the rules adopted by DHES under this Act. These data shall be used in applying Sections 5.03-B.3, 5.03-B.4, and 5.03-B.5 of these regulations. Subdivision proposals shall also provide for adequate drainage to minimize potential flood hazards.

2. The Floodplain Administrator may obtain, review, and reasonably use any base flood elevation and floodway data available from federal, state, or other sources, until such data have been provided by FEMA, to enforce Section 5.03-B.3 and 5.03-B.4 of these regulations; and

3. The Floodplain Administrator may use historical flood elevations to determine suitable fill or flood-proofing elevations as required by Sections 5.03-B.3 and 5.03-B.4 of these regulations;

4. If historical flood evidence is not available, then the Floodplain Administrator shall determine, from a field review at the proposed development site, an appropriate fill or flood-proofing elevation to use in applying Sections 5.03-B.3 and 5.03-B.4 of these regulations. In the absence of depth or elevation information, a minimum two-foot flood depth shall be used; and

5. Proposed structures must be anchored to prevent floatation or collapse and must be located as far from stream channels as practicable.

C. Prohibited Uses. Those uses prohibited in the floodway fringe, in accordance with Section 5.03-C of these regulations, shall also be prohibited within the A-Zone floodplain boundaries.

D. Floodplain Boundary Interpretation. The Floodplain Administrator shall make interpretations where needed as to the exact location of the unnumbered A-Zone floodplain boundary when there is a conflict between a mapped boundary and actual field conditions.

CHAPTER VII
FLOOD-PROOFING REQUIREMENTS

7.01 Certification

If the following flood-proofing requirements are to be applied to a proposed structure, as stipulated by the Floodplain Administrator in accordance with these regulations, the methods used must be certified as adequate by a registered professional engineer or architect.

7.02 Conformance

Permitted flood-proof systems shall conform to the conditions listed below—and the flood-proofing standards listed in Section 5.03-B.4 of these regulations for commercial and industrial structures.

A. Electrical Systems

1. All incoming power service equipment, including all metering equipment, control centers, transformers, distribution and lighting panels, and all other stationary equipment must be located at least two feet above the base flood elevation;

2. Portable or movable electrical equipment may be placed below the base flood elevation, if the equipment can be disconnected by a single submersible plug-and-socket assembly;

3. The main power service line shall have automatic or manually operated electrical disconnect equipment located at an accessible location outside the 100-year floodplain and above the base flood elevation; and

4. All electrical wiring systems installed at or below the elevation of the 100-year flood shall be suitable for continous submergence and may not contain fibrous components.

B. Heating Systems

1. Float operated automatic control valves must be installed in gas furnace supply lines so that the fuel supply is automatically shut off when flood waters reach the floor level where the furnace is located;

2. Manually operated gate valves must be installed in gas supply lines. The gate valves must be operable from a location above the elevation of the 100-year flood.

3. Electric heating systems must be installed in accordance with the provisions of Section 7.02-A.

C. Plumbing Systems

1. Sewer lines, except those to be buried and sealed in vaults, must have check valves installed to prevent sewage backup into permitted structures; and

2. All toilet stools, sinks, urinals, and drains must be located so the lowest point of possible water entry is at least two feet above the elevation of the 100-year flood.

Floodplain Development Permit Application Form

APPENDIX A

(revised 11/26/86)

FLOODPLAIN DEVELOPMENT PERMIT

A permit must be issued by the Floodplain Administrator before the development can begin.

THIS SECTION TO BE COMPLETED BY THE APPLICANT

Name of Applicant ______________________________ Date ____________

Address ______________________________

______________________________ Phone ____________

Location of Proposed Development ______________________________

____

Description of Development (check box or boxes which best describe development)

- ___ Residential
- ___ Mobile Home
- ___ Commercial
- ___ Subdivision
- ___ Mobile Home Park
- ___ Watercourse Alteration
- ___ Bridge
- ___ Culvert
- ___ Fill
- ___ New Construction
- ___ Addition
- ___ Improvement
- ___ Other (explain) ______________________________

____
Signature of Applicant

ATTACH TO THE APPLICATION THE FOLLOWING INFORMATION

Plans in duplicate drawn to scale showing:

A) Dimensions of the development site
B) Elevations of the development site
C) Proposed structures: buildings, mobile homes, bridges, culverts, etc. (include existing structures where appropriate)
D) Placement, number, and type of anchors for mobile homes
E) Utility connection locations: sewer, water, gas, and electric
F) Bridge and culvert plans must include hydraulic computations by a registered engineer
G) Fill location & dimensions
H) Storage of materials
I) Drainage facilities
J) Water course alterations including plan drawings, cross sections, and hyraulic computations.

Be sure to include the following:

1) Mean Sea Level (MSL) elevation of the lowest floor (including basement) of proposed structure(s), or
2) MSL elevation to which structure(s) is to be floodproofed.
(Applicants may be required to furnish additional information.)

____ A permit fee of $ ______ must accompany this application. ____ No fee is required.

Send this application and all correspondence concerning this permit to:

Name & Title ______________________________

Address ______________________________

______________________________ Phone ____________

Permit Number ____________
Date Received ____________

ADMINISTRATIVE ACTION

TO BE COMPLETED BY THE FLOODPLAIN ADMINISTRATOR

The proposed development is in the ____ Floodway ____ Floodway Fringe ____ Floodplain: no Base Flood Elevations given

The Base Flood Elevation at the development site is ____________ feet

Source Documents ____

In A-Zone where no Base Flood Elevation data is available, what is the historical flood elevation or depth as determined by the Floodplain Administrator? ____________ feet (Data may be available from high water marks, residents, newspapers, or other sources).

Document sources used to make determination ________________________________

Elevation Requirements

MSL Elevation to which the first floor is to be elevated ____________ feet.

MSL Elevation to which the structure is to be floodproofed ____________ feet.

MSL Elevation to which the compacted fill is to be elevated ____________ feet.

In A-Zone if historical flood elevation or depth cannot be determined, what conditions are required?

____ Elevate 2 feet above adjacent grade (residential)

____ Floodproof 2 feet above adjacent grade (commercial)

____ Applicant must provide Base Flood Elevation data

____ Prohibit basement construction

____ Other (explain) ____

Action Taken

____ The proposed development is not in conformance with applicable Floodplain Management Standards. Permit is denied. Explanation attached.

____ The proposed development is in partial conformance with the applicable Floodplain Management Standards. A conditional approval is granted. Conditions attached.

____ The plans and materials submitted in support of the proposed development are in compliance with applicable Floodplain Management Standards. Permit is approved.

____ Applicant has been advised that the proposed development may require a "310" permit (Section 75-7-101 et.seq. MCA) from the local Conservation District, or a "Stream Protection Act" (Section 87-5-501 et.seq. MCA) approval from the Department of Fish, Wildlife and Parks, and/or a "404" permit from the U.S. Army Corps of Engineers.

Building Elevation and Compliance Certification

Certificates from registered professional engineer or land surveyor verifying elevations are attached.

The certified as-built MSL elevation of the lowest floor of the structure is ____________ feet.

The certified as-built MSL floodproofed elevation of the structure is ____________ feet.

Certificate of Occupancy or Compliance Issued ____________ ________________________________

Date Signature of Floodplain Administrator

Elevation Certificate

APPENDIX B

FEDERAL EMERGENCY MANAGEMENT AGENCY

NATIONAL FLOOD INSURANCE PROGRAM

ELEVATION CERTIFICATE

AND

INSTRUCTIONS

PAPERWORK BURDEN DISCLOSURE NOTICE

GENERAL - This information is provided pursuant to Public Law 96-511, (The Paperwork Reduction Act of 1980, as amended), dated December 11, 1980, to allow the public to participate more fully and meaningfully in the Federal paperwork review process.

AUTHORITY - Public Law 96-511, amended; 44 U.S.C. 3507; and 5 CFR 1320

DISCLOSURE OF BURDEN - Public reporting burden for the collection of information entitled "Post-Construction Elevation Certificate/Floodproofing Certificate" (FEMA Form 81-31 and 81-65) is estimated to average 12 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the forms. Send comments regarding the burden estimate or any aspect of the collection, including suggestions for reducing the burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W. 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0077), Washington, D.C. 20503.

ELEVATION CERTIFICATE

O.M.B. No 3067-0077
Expires May 31, 1993

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

ATTENTION: Use of this certificate does not provide a waiver of the flood insurance purchase requirement. This form is used only to provide elevation information necessary to ensure compliance with applicable community floodplain management ordinances, to determine the proper insurance premium rate, and/or to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR).

Instructions for completing this form can be found on the following pages.

SECTION A PROPERTY INFORMATION	FOR INSURANCE COMPANY USE
BUILDING OWNER'S NAME	POLICY NUMBER
STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER	COMPANY NAIC NUMBER

OTHER DESCRIPTION (Lot and Block Numbers, etc.)

CITY	STATE	ZIP CODE

SECTION B FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM (See Instructions):

1. COMMUNITY NUMBER	2. PANEL NUMBER	3. SUFFIX	4. DATE OF FIRM INDEX	5. FIRM ZONE	6. BASE FLOOD ELEVATION (in AO Zones, use depth)

7. Indicate the elevation datum system used on the FIRM for Base Flood Elevations (BFE): ☐ NGVD '29 ☐ Other (describe on back)
8. For Zones A or V, where no BFE is provided on the FIRM, and the community has established a BFE for this building site, indicate the community's BFE: ☐☐☐☐☐.☐ feet NGVD (or other FIRM datum–see Section B, Item 7).

SECTION C BUILDING ELEVATION INFORMATION

1. Using the Elevation Certificate Instructions, indicate the diagram number from the diagrams found on Pages 5 and 6 that best describes the subject building's reference level _____ .

2(a). FIRM Zones A1-A30, AE, AH, and A (with BFE). The top of the reference level floor from the selected diagram is at an elevation of ☐☐☐☐☐.☐ feet NGVD (or other FIRM datum–see Section B, Item 7).

(b). FIRM Zones V1-V30, VE, and V (with BFE). The bottom of the lowest horizontal structural member of the reference level from the selected diagram, is at an elevation of ☐☐☐☐☐.☐ feet NGVD (or other FIRM datum–see Section B, Item 7).

(c). FIRM Zone A (without BFE). The floor used as the reference level from the selected diagram is ☐☐.☐ feet above ☐ or below ☐ (check one) the highest grade adjacent to the building.

(d). FIRM Zone AO. The floor used as the reference level from the selected diagram is ☐☐.☐ feet above ☐ or below ☐ (check one) the highest grade adjacent to the building. If no flood depth number is available, is the building's lowest floor (reference level) elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown

3. Indicate the elevation datum system used in determining the above reference level elevations: ☐ NGVD '29 ☐ Other (describe under Comments on Page 2). *(NOTE: If the elevation datum used in measuring the elevations is different than that used on the FIRM [see Section B, Item 7], then convert the elevations to the datum system used on the FIRM and show the conversion equation under Comments on Page 2.)*

4. Elevation reference mark used appears on FIRM: ☐ Yes ☐ No (See Instructions on Page 4)

5. The reference level elevation is based on: ☐ actual construction ☐ construction drawings
(NOTE: Use of construction drawings is only valid if the building does not yet have the reference level floor in place, in which case this certificate will only be valid for the building during the course of construction. A post-construction Elevation Certificate will be required once construction is complete.)

6. The elevation of the lowest grade immediately adjacent to the building is: ☐☐☐☐☐.☐ feet NGVD (or other FIRM datum-see Section B, Item 7).

SECTION D COMMUNITY INFORMATION

1. If the community official responsible for verifying building elevations specifies that the reference level indicated in Section C, Item 1 is not the "lowest floor" as defined in the community's floodplain management ordinance, the elevation of the building's "lowest floor" as defined by the ordinance is: ☐☐☐☐☐.☐ feet NGVD (or other FIRM datum–see Section B, Item 7).
2. Date of the start of construction or substantial improvement ____________________ .

SECTION E CERTIFICATION

This certification is to be signed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1–A30, AE, AH, A (with BFE),V1–V30,VE, and V (with BFE) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information, may also sign the certification. In the case of Zones AO and A (without a FEMA or community issued BFE), a building official, a property owner, or an owner's representative may also sign the certification.

Reference level diagrams 6, 7 and 8 - Distinguishing Features–If the certifier is unable to certify to breakaway/non-breakaway wall, enclosure size, location of servicing equipment, area use, wall openings, or unfinished area Feature(s), then list the Feature(s) not included in the certification under Comments below. The diagram number, Section C, Item 1, must still be entered.

I certify that the information in Sections B and C on this certificate represents my best efforts to interpret the data available.
I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME LICENSE NUMBER (or Affix Seal)

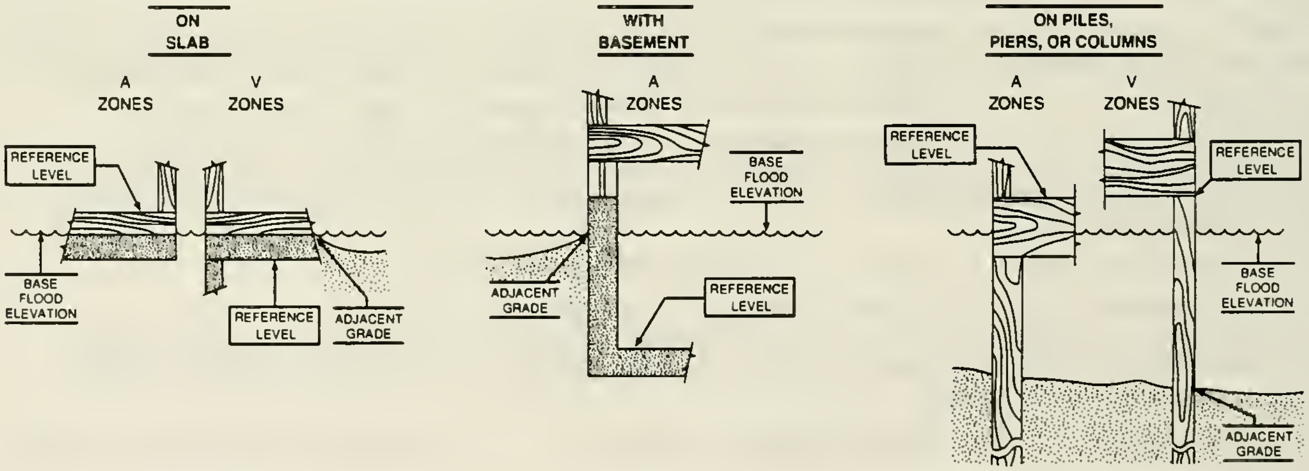
TITLE COMPANY NAME

ADDRESS CITY STATE ZIP

SIGNATURE DATE PHONE

Copies should be made of this Certificate for: 1) community official, 2) insurance agent/company, and 3) building owner.

COMMENTS:



The diagrams above illustrate the points at which the elevations should be measured in A Zones and V Zones.

Elevations for all A Zones should be measured at the top of the reference level floor.

Elevations for all V Zones should be measured at the bottom of the lowest horizontal structural member.

THE NATIONAL FLOOD INSURANCE PROGRAM
ELEVATION CERTIFICATE

PURPOSE OF THE ELEVATION CERTIFICATE

The Elevation Certificate is an important administrative tool of the National Flood Insurance Program (NFIP).

As part of the agreement for making flood insurance available in a community, the NFIP requires the community to adopt a floodplain management ordinance containing certain minimum requirements intended to reduce future flood losses. One such requirement is that the community "obtain the elevation of the lowest floor (including basement) of all new and substantially improved structures, and maintain a record of all such information." The Elevation Certificate is one way for a community to comply with this requirement.

The Elevation Certificate is also required to properly rate post-FIRM structures, which are buildings constructed after publication of the Flood Insurance Rate Map (FIRM), for flood insurance in FIRM Zones A1-A30, AE, AO, AH, A (with Base Flood Elevations [BFE's]), V1-V30, VE, and V (with BFE's). In addition, the Elevation Certificate is also needed for pre-FIRM structures being rated under post-FIRM flood insurance rules.

Use of this certificate does not in any way alter the flood insurance purchase requirement. The Elevation Certificate is only used to provide information necessary to ensure compliance with applicable community floodplain management ordinances, to determine the proper flood insurance premium rate, and/or to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR). Only a LOMA or LOMR from the Federal Emergency Management Agency (FEMA) can amend the FIRM and remove the Federal requirement for a lending institution to require the purchase of flood insurance. Note that the lending institution may still require flood insurance.

This certificate is only used to certify the elevation of the reference level of a building. If a non-residential building is being floodproofed, then a Floodproofing Certificate must be completed in addition to certifying the building's elevation. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or affect the insurance rating unless the community has been issued an exception by FEMA to allow floodproofed residential basements.

INSTRUCTIONS FOR COMPLETING THE ELEVATION CERTIFICATE

The Elevation Certificate is to be completed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1-A30, AE, AH, A (with BFE's), V1-V30, VE, and V (with BFE's) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information may also complete this form. For Zones AO and A (without BFE's), a building official, a property owner, or an owner's representative may also provide the information on this certification.

SECTION A Property Information

The Elevation Certificate identifies the building, its owner and its location. Provide the building owner's name(s), the building's complete street address, and lot and block number. If the property address is a rural route or PO box number, provide a legal description or an abbreviated location description based on distance from a reference point.

SECTION B Flood Insurance Rate Map Information

In order to properly complete the Elevation Certificate, it is necessary to locate the building on the appropriate FIRM, and record the appropriate information. To obtain a FIRM, contact the community or call 1-800-333-1363.

The Elevation Certificate may be completed based on either the FIRM in effect at the time of the certification *or* the FIRM in effect when construction of the building was started.

Items 1 - 6. Using the FIRM Index and the appropriate FIRM panel for the community, record the community number, panel (or page) number, suffix, and Index date. From the appropriate FIRM panel, locate the property and record the zone and the BFE (or flood depth number) at the building site. BFE's are shown on a FIRM for Zones A1-A30, AE, AH, V1-V30, and VE; flood depth numbers are shown for Zone AO.

Item 7. Record the vertical datum system to which the elevations on the applicable FIRM are referenced. The datum is specified in the upper right corner of the title block of the FIRM.

Item 8. In A or V Zones where BFE's are not provided on the FIRM, the community may have established BFE's based on data from other sources. For subdivisions and other development greater than 50 lots or 5 acres, establishment of BFE's is required by community floodplain management ordinance. When this is the case, complete this item.

SECTION C Building Elevation Information

Item 1. The Elevation Certificate uses a building's reference level as the point for measuring its elevation. Pages 5 and 6 of this Elevation Certificate package contain a series of eight diagrams of various building types that are to be used to help determine the reference level. Choose the diagram that best represents this building, record the diagram number, and use the indicated reference level to measure the elevation as requested in Items 2a-d.

Item 2. Depending on the property location's FIRM Zone, complete Item 2a, 2b, 2c, or 2d. Use the reference level shown in the appropriate building diagram as the point of measurement. As shown in the diagram on the back of the Certificate, for all A Zones, the elevation should be measured at the top of the reference level floor. For all V Zones, the elevation should be measured at the bottom of the lowest horizontal structural member of the reference level floor. Reporting of elevations in Items 2a and 2b should be to the nearest tenth of a foot, or alternatively, unless prohibited by state or local ordinance, the reference level elevation may be "rounded down" to the nearest whole foot (**"rounding up" is prohibited).**

Item 2(a). For structures located in FIRM Zones A1-A30, AE, AH, and A (with BFE's), record the elevation (to the nearest tenth of a foot) of the top of the floor identified as the reference level in the applicable diagram.

Item 2(b). For structures located in FIRM Zones V1-V30, VE, and V (with BFE's), record the elevation (to the nearest tenth of a foot) of the bottom of the lowest horizontal structural member of the floor identified as the reference level in the applicable diagram .

Item 2(c). For structures located in FIRM Zone A (without BFE's), record the height (to the nearest tenth of a foot) of the top of the floor indicated as the reference level (from the applicable diagram) above or below the highest adjacent grade immediately next to the building.

Item 2(d). For structures located in FIRM Zone AO, the FIRM will show the base flood depth. For locations in FIRM Zone AO record the height (to the nearest tenth of a foot) of the top of the floor identified as the reference level (from the applicable diagram) above or below the highest adjacent grade immediately next to the building. For post-FIRM buildings, the community's floodplain management ordinance requires that this value equal or exceed the base flood depth provided on the FIRM. For those few communities where this base flood depth is not available, the community will need to determine if the lowest floor is elevated in accordance with their floodplain management ordinance.

Item 3. Record the vertical datum system used in identifying the reference level elevations for all buildings. If the datum used in measuring the elevations is different than that used on the FIRM, then convert the elevations in Items 2a-d to the datum used on the FIRM, and show the conversion equation under the Comments section on Page 2.

Item 4. Indicate if the elevation reference mark used appears on the FIRM. Reference marks other than those shown on the FIRM may be used for elevation determinations. In areas experiencing ground subsidence, the most recently adjusted reference mark elevations must be used for reference level elevation determinations.

Item 5. Indicate if the reference level used in making the elevation measurement is based on actual construction or construction drawings. Construction drawings should only be used if the building does not yet have the reference level floor in place, in which case the Elevation Certificate will only be valid for the building during the course of construction. A post-construction Elevation Certificate will be needed once construction is complete.

Item 6. Record the elevation measurement of the lowest grade adjacent to the building (to the nearest tenth of a foot). Adjacent grade is defined as the elevation of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure. This measurement should be to the nearest tenth of a foot if this Certificate is being used to support a request for a LOMA/LOMR.

SECTION D Community Information

Completion of this section may be required by the community in order to meet the minimum floodplain management requirements of the NFIP. Otherwise, completion of this section is not required.

Item 1. The community's floodplain management ordinance requires elevation of the building's "lowest floor" above the BFE. For the vast majority of building types, the reference level and the lowest floor will be the same. If the community determines that there is a discrepancy, record the elevation of the lowest floor.

Item 2. Enter date. These terms are defined by local ordinance.

SECTION E Certification

Complete as indicated. The Elevation Certificate may only be signed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1-A30, AE, AH, A (with BFE's), V1-V30, VE, and V (with BFE's) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information may also sign this certification. In the case of Zones AO and A (without BFE's), a building official, a property owner, or an owner's representative may sign this certification.

Certification is normally to the information provided in Sections B and C. If the certifier is unable to certify to the selection of reference level diagram 6, 7 or 8 (Section C, Item 1), e.g., because of difficulty in obtaining construction or building use information needed to determine the Distinguishing Feature(s), the certifier must list the Feature(s) excluded from the certification under Comments on Page 2. The diagram number used for the Reference level must still be entered in Section C, Item 1.

INSTRUCTIONS

The following 8 diagrams contain descriptions of various types of buildings. Compare the features of your building with those shown in t[illegible]diagrams and select the diagram most applicable. Indicate the diagram number on the Elevation Certificate (Section C, Item 1) and c[illegible]lete the Certificate. The reference level floor is that level of the building used for underwriting purposes.

NOTE: In all A Zones, the reference level is the top of the lowest floor; In V Zones the reference level is the bottom of the lowest horizontal structural member (see diagram on page 2). Agents should refer to the Flood Insurance Manual for instruction on lowest floor definition.

DIAGRAM NUMBER 1

ALL SINGLE AND MULTIPLE FLOOR BUILDINGS (OTHER THAN SPLIT LEVEL), INCLUDING MANUFACTURED (MOBILE) HOUSING AND HIGH RISE BUILDINGS, EITHER DETACHED OR ROW TYPE (E.G., TOWNHOUSE, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

Distinguishing Feature - The first floor is *not* below ground level (grade) on *all* sides*. This includes "walkout" basements, where at least one side is at or above grade. (Not illustrated)

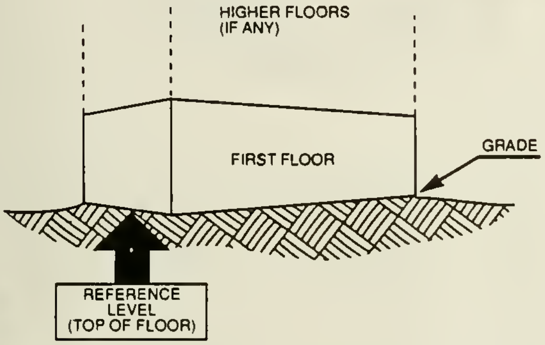


DIAGRAM NUMBER 2

ALL SINGLE AND MULTIPLE FLOOR BUILDINGS (OTHER THAN SPLIT LEVEL), INCLUDING MANUFACTURED (MOBILE) HOUSING AND HIGH RISE BUILDINGS, EITHER DETACHED OR ROW TYPE (E.G., TOWNHOUSES, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

Distinguishing Feature - The first floor *or* basement (including an underground garage*) is below ground level (grade) on *all* sides*.

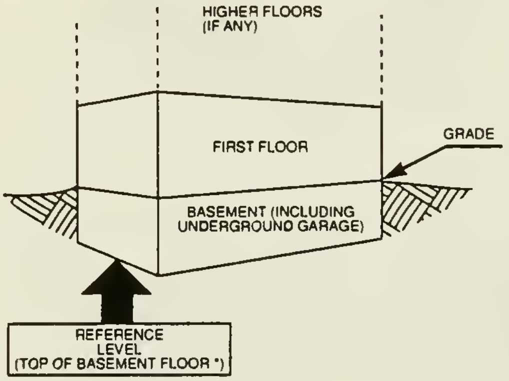

HIGHER FLOORS (IF ANY)
FIRST FLOOR
GRADE
BASEMENT (INCLUDING UNDERGROUND GARAGE)
REFERENCE LEVEL (TOP OF BASEMENT FLOOR *)

DIAGRAM NUMBER 3

ALL SPLIT LEVEL BUILDINGS, EITHER DETACHED OR ROW TYPE (E.G., TOWNHOUSES, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

Distinguishing Feature - The lower level is *not* below ground level (grade) on *all* sides*. This includes "walkout" basements, where at least one side is at or above grade.

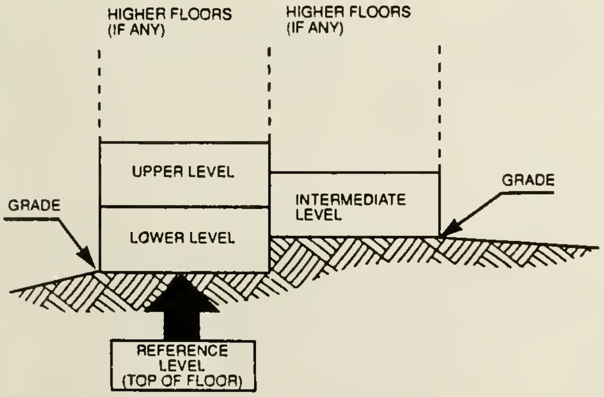
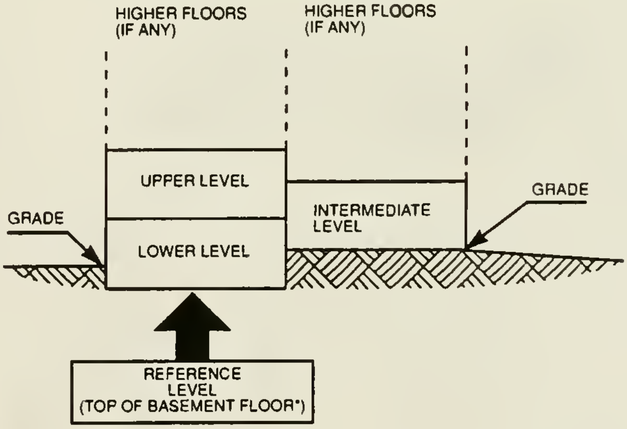


DIAGRAM NUMBER 4

ALL SPLIT LEVEL BUILDINGS, EITHER DETACHED OR ROW TYPE (E.G., TOWNHOUSES, ETC.); WITH OR WITHOUT ATTACHED GARAGE.

Distinguishing Feature - The lower level *(or* intermediate level) is below ground level (grade) on *all* sides*.



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* *Under the National Flood Insurance Program's risk classification and insurance coverage, a floor that is below ground level (grade) on all sides is considered a basement even though the floor is used for living purposes, or as an office, garage, workshop, etc.*

Note: In all A Zones, the reference level is the top of the lowest floor; in V Zones the reference level is the bottom of the lowest horizontal structural member (see diagram on page 2). Agents should refer to the Flood Insurance Manual for instruction on lowest floor definition.

DIAGRAM NUMBER 5

ALL BUILDINGS, INCLUDING MANUFACTURED (MOBILE) HOMES ELEVATED ON PIERS, POSTS, COLUMNS, SHEAR WALLS, WITH OR WITHOUT PARKING AREA BELOW ELEVATED FLOOR.

Distinguishing Feature - For all zones, the area below the elevated floor is open, with no obstruction to the flow of flood waters (open wood lattice work or readily removable insect screening is permissible).

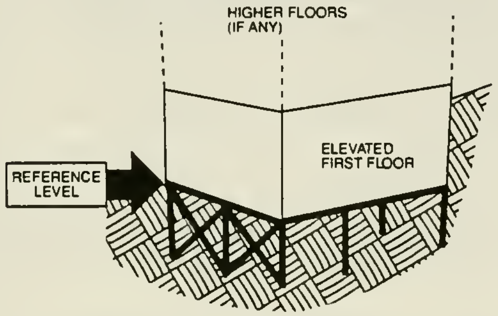


DIAGRAM NUMBER 6

ALL BUILDINGS, INCLUDING MANUFACTURED (MOBILE) HOMES ELEVATED ON PIERS, POSTS, COLUMNS, SHEAR WALLS, WITH OR WITHOUT PARKING AREA BELOW ELEVATED FLOOR.

Distinguishing Feature - For V Zones only, the area below the elevated floor is enclosed, either partially or fully, by solid breakaway walls.** When enclosed area is greater than 300 square feet or contains equipment servicing the building, use Diagram Number 7; this will result in a higher insurance rate. The enclosed area can be used for parking, building access or limited storage.

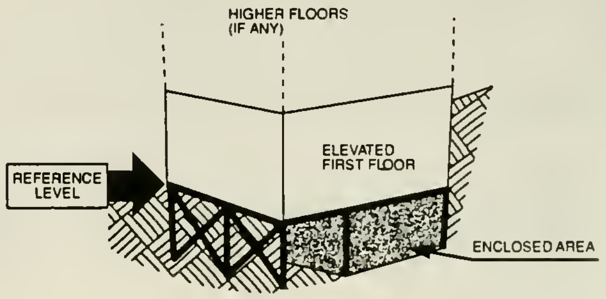


DIAGRAM NUMBER 7

ALL BUILDINGS, INCLUDING MANUFACTURED (MOBILE) HOMES ELEVATED ON PIERS, POSTS, COLUMNS, SHEAR WALLS, SOLID NON-BREAKAWAY WALLS, WITH OR WITHOUT PARKING AREA BELOW ELEVATED FLOOR.

Distinguishing Feature - For all zones, the area below the elevated floor is enclosed, either partially or fully, by solid non-breakaway walls, or contains equipment servicing the building. For V Zones only, the area is enclosed, either partially or fully, by solid breakaway walls** having an enclosed area greater than 300 square feet. For A Zones only, with an area enclosed by solid walls having proper openings,*** and used only for parking, building access, or limited storage, use Diagram Number 8 to determine the reference level.

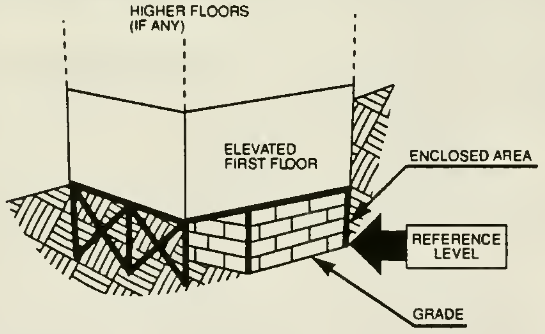
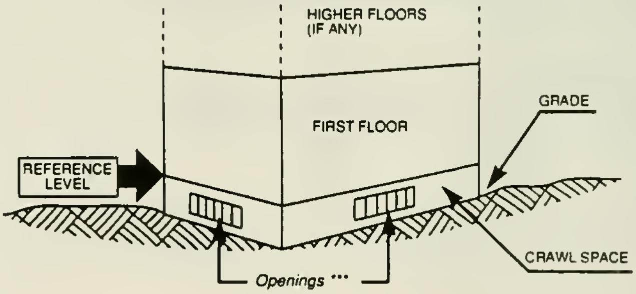


DIAGRAM NUMBER 8

ALL BUILDINGS CONSTRUCTED ABOVE AN UNFINISHED SPACE, INCLUDING CRAWL SPACE.

Distinguishing Feature - For A Zones only, the area below the first floor is enclosed by solid or partial perimeter walls, is unfinished, and contains no equipment servicing the structure. The area can be used for parking, building access, or limited storage.



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* *Under the National Flood Insurance Program's risk classification and insurance coverage, a floor that is below ground level (grade) on all sides is considered a basement even though the floor is used for living purposes, or as an office, garage, workshop, etc.*

** *Solid breakaway walls are walls that are not an integral part of the structural support of a building and are intended through their design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation. An area so enclosed is not secure against forceable entry.*

*** *If the area below the lowest floor is fully enclosed, then a minimum of two openings are required with a total net area of at least one square inch for every square foot of area enclosed with the bottom of the openings no more than one foot above grade. Alternatively, certification may be provided by a registered professional engineer or architect that the design will allow equalization of hydrostatic flood forces on exterior walls. If neither of these criteria are met, then the reference level is the lowest grade adjacent to the structure.*

☆ US GOVERNMENT PRINTING OFFICE 1990 - 517-751 - 1302/20885

Floodproofing Certificate

APPENDIX C

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

O.M.B. No 3067-0077
Expires May 31, 1993

FLOODPROOFING CERTIFICATE

FOR NON-RESIDENTIAL STRUCTURES

The floodproofing of non-residential buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation; however, a floodproofing design certification is required. This form is to be used for that certification. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or effect the insurance rating unless the community has been issued an exception by FEMA to allow floodproofed residential basements. The permitting of a floodproofed residential basement requires a separate certification specifying that the design complies with the local floodplain management ordinance.

FOR INSURANCE COMPANY USE
POLICY NUMBER
COMPANY NAIC NUMBER

BUILDING OWNER'S NAME

STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER

OTHER DESCRIPTION (Lot and Block Numbers, etc.)

CITY | STATE | ZIP CODE

SECTION I FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM:

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM INDEX	FIRM ZONE	BASE FLOOD ELEVATION (in AO Zones, use depth)

SECTION II FLOODPROOFING INFORMATION (By a Registered Professional Engineer or Architect)

Floodproofing Design Elevation Information:

Building is floodproofed to an elevation of |_|_|_|_|_|.|_| feet NGVD. (Elevation datum used must be the same as that on the FIRM.)

Height of floodproofing on the building above the lowest adjacent grade is |_|_|.|_| feet.

(NOTE: for insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the Base Flood Elevation to receive rating credit. If the building is floodproofed only to the Base Flood Elevation, then the building's insurance rating will result in a higher premium.)

SECTION III CERTIFICATION (By a Registered Professional Engineer or Architect)

Non-Residential Floodproofed Construction Certification:

I certify that based upon development and/or review of structural design, specifications, and plans for construction that the design and methods of construction are in accordance with accepted standards of practice for meeting the following provisions:

> The structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation indicated above, with walls that are substantially impermeable to the passage of water.
>
> All structural components are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

I certify that the information on this certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME | LICENSE NUMBER (or Affix Seal)

TITLE | COMPANY NAME

ADDRESS | CITY | STATE | ZIP

SIGNATURE | DATE | PHONE

Copies should be made of this Certificate for: 1) community official, 2) Insurance agent/company, and 3) building owner.

REPLACES EDITION OF JUN 87, WHICH IS OBSOLETE

FEMA Form 81-65, MAY 90

593-9049-A 5/90

PAPERWORK BURDEN DISCLOSURE NOTICE

GENERAL - This information is provided pursuant to Public Law 96-511, (The Paperwork Reduction Act of 1980, as amended), dated December 11, 1980, to allow the public to participate more fully and meaningfully in the Federal paperwork review process.

AUTHORITY - Public Law 96-511, amended; 44 U.S.C. 3507; and 5 CFR 1320

DISCLOSURE OF BURDEN - Public reporting burden for the collection of information entitled "Post-Construction Elevation Certificate/Floodproofing Certificate" (FEMA Form 81-31 and 81-65) is estimated to average 12 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the forms. Send comments regarding the burden estimate or any aspect of the collection, including suggestions for reducing the burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W. 20472; and to the Office of Management and Budget, Paperwork Reduction Project (3067-0077), Washington, D.C. 20503.

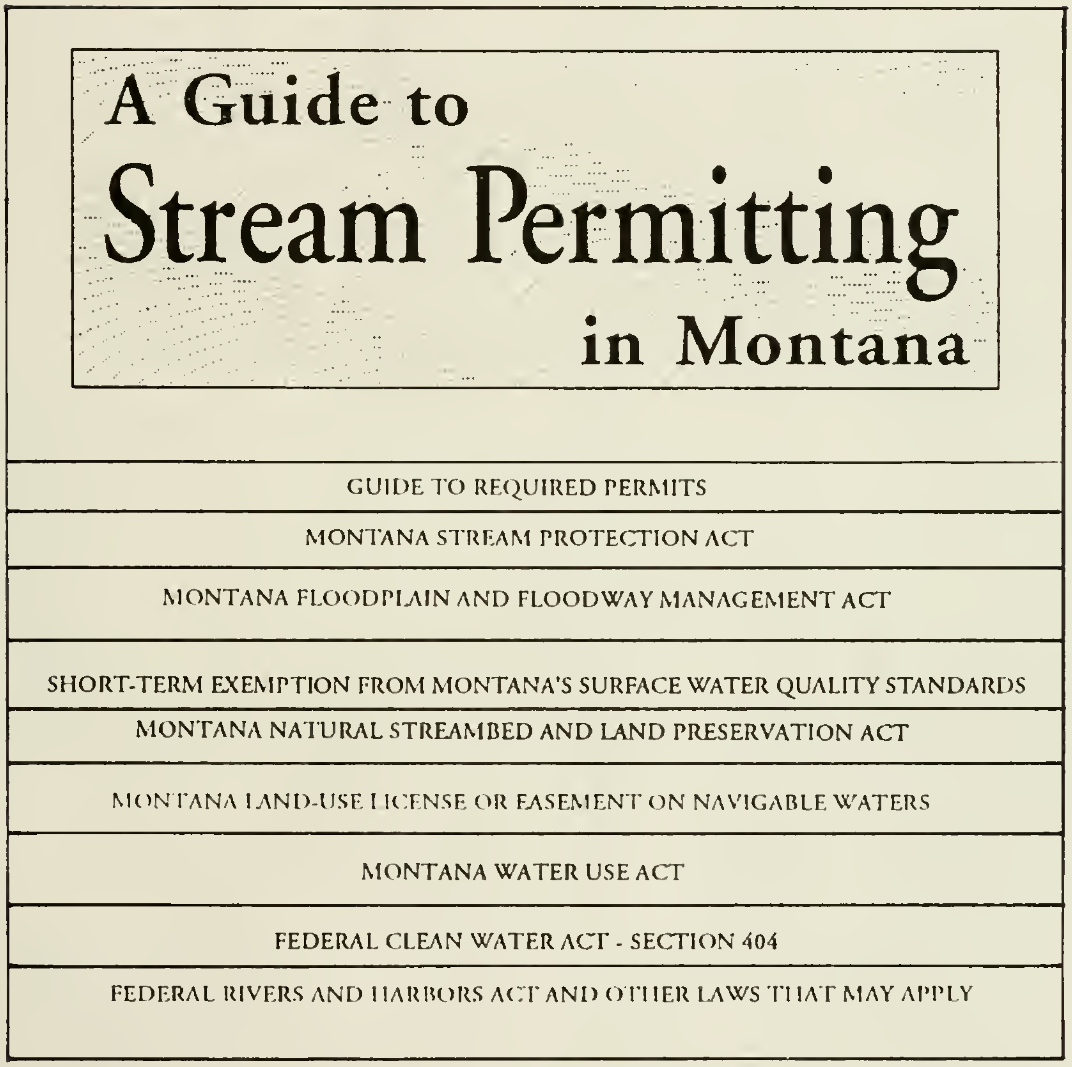
*U.S. GPO: 1990-517-678/20259

A Guide to Stream Permitting

APPENDIX D

A GUIDE TO STREAM PERMITTING
(SEE INSIDE BACK COVER POCKET)

This guide explains the various permits that may be required for a project. The diagram inside the pamphlet cover will help you determine where your project will be built in terms of streambed, streambanks, wetlands, or floodplains.



A Guide to
Stream Permitting
in Montana

GUIDE TO REQUIRED PERMITS
MONTANA STREAM PROTECTION ACT
MONTANA FLOODPLAIN AND FLOODWAY MANAGEMENT ACT
SHORT-TERM EXEMPTION FROM MONTANA'S SURFACE WATER QUALITY STANDARDS
MONTANA NATURAL STREAMBED AND LAND PRESERVATION ACT
MONTANA LAND-USE LICENSE OR EASEMENT ON NAVIGABLE WATERS
MONTANA WATER USE ACT
FEDERAL CLEAN WATER ACT - SECTION 404
FEDERAL RIVERS AND HARBORS ACT AND OTHER LAWS THAT MAY APPLY

Agencies Regulating Water-Related Projects

APPENDIX E

AGENCIES REGULATING WATER-RELATED PROJECTS

State of Montana

Dept. of Fish, Wildlife and Parks
Resource Assessment Unit
1420 East Sixth Avenue
Helena, MT 59620-0701
444-2603

Dept.of Natural Resources and Conservation
1520 East Sixth Avenue
Helena, MT 59620-2301
444-6699

Conservation and Resource Development Division
1520 East Sixth Avenue
Helena, MT 59620-2301
444-6667

Floodplain Management Section
Engineering Bureau
1520 East Sixth Avenue
Helena, MT 59620-2301
444-6646

Dept. of Health and Environmental Sciences
Drinking Water/Subdivision Section
Cogswell Building
Helena, MT 59620-0901
444-4549

Solid and Hazardous Waste Bureau
836 Front Street
Helena, MT 59620
444-2821

Water Quality Bureau
Cogswell Building
Helena, MT 59620-0901
444-2406

Dept. of State Lands
1625 Eleventh Avenue
Helena, MT 59620-1601
444-2074

Montana State Historic Preservation Office
Veteran's Memorial Building
225 North Roberts
Helena, MT 59620-1201
444-7715

Federal

U.S. Dept. of Agriculture
Forest Service
Federal Building
Helena, MT 59626
449-5201

U.S. Dept. of Agriculture
Soil Conservation Service
Bozeman Office
Federal Building
Bozeman, MT 59715
587-6811

U.S. Dept. of Interior
Bureau of Land Management
PO Box 36800
Billings, MT 59107
657-6561

U.S. Dept. of Interior
Fish & Wildlife Service
3150 Canyon Ferry Road
East Helena, MT 59635

U.S. Army Corps of Engineers
Seattle Office
Box C-3755
Seattle, WA 98124
(206) 764-3660

U.S. Army Corps of Engineers
Omaha Office
6014 U.S. Post Office & Courthouse
215 North 17th Street
Omaha, NE 68102
(402) 221-1221

Federal Energy Regulatory Commission
825 North Capital Street
Room 3130
Washington, DC 20426
(202) 357-8400

Environmental Protection Agency
Federal Building
Helena, MT 59626
449-5432

Laws and Regulations Governing Water-Related Projects

APPENDIX F

LAWS AND REGULATIONS GOVERNING WATER-RELATED PROJECTS

ARCHAEOLOGICAL & HISTORICAL

Several laws apply both to state and federal lands. Among these are laws that require a cultural resource survey before any ground-disturbing activity takes place. Developers should plan on a 30-day notice for the cultural survey to be made. Also, work can only take place during snow-free periods. If a cultural resource is discovered, it must be evaluated for possible nomination to the National Register of Historic Places. If eligible for listing on this register, the site must be avoided or the impacts must be mitigated. If the site is located on federal land sites, local land manager should be contacted. For state or private land sites, the State Historic Preservation Office should be notified.

Coal & Uranium Mine Reclamation (Surface Mine Control Reclamation Act and Montana Strip and Underground Mine Reclamation Act) These laws, administered by the State Board of Land Commissioners, set terms and conditions for coal and uranium mining. Both the acts require permit and reclamation plans.

E.O. 11988 Floodplain Management & E.O. 11990 Protection of Wetlands
These executive orders apply to federal agencies and provide guidance relative to their actions dealing with federally and privately owned floodplains and wetlands. The federal government is supposed to examine alternatives to developing floodplain or wetland areas. This also includes federally funded projects initiated by other parties. If you have a project targeted on these types of lands, you will be advised on requirements by the federal agencies that manage this land. Contact the local agency office.

Federal Energy Regulation Commission (FERC)
Formerly known as the Federal Power Commission (FPC), FERC issues licenses for primary transmission lines on federal land and for hydroelectric projects, including minor projects such as water-driven power generators for home use. Allow nine months for the licensing process.

Federal Water Pollution Control Act (Clean Water Act)
Section 404 of this act states that a Department of the Army permit issued by the Corps of Engineers is required for the discharge of dredged or fill material into United States water or onto adjacent wetlands. Some minor activities are allowed by nationwide or general permits. Contact the appropriate district office to determine permit requirements prior to performing any work of this type.

Floodplain and Floodway Management Act
The purpose of this law is to restrict or prohibit uses that are dangerous to the public health or safety of property during floods or that cause increased flood heights or velocities. Floodplains are being mapped, and these maps serve as the technical basis for developing local floodplain regulations. A floodplain development permit is required, and enforcement of the regulations is made by a local governing body, usually the county commissioners or a zoning board. The Department of Natural Resources and Conservation provides technical help, and floodplain maps are available for inspection at the local clerk and recorder's offices.

General Mining Law
This law applies to mining activities undertaken on federal land. If a miner plans to conduct any activity that might cause surface disturbance, the miner must file a letter of intent with the land management agency's local office. Depending on the activity's nature and the affected environment, a plan of operation may be required, along with a reclamation bond.

Lakeshore Protection
This permit program is administered by county commissioners. Program requirements are similar to those necessary for floodplain protection. Contact your county planning office for information and permit applications.

Local Zoning Laws
Zoning of rural areas is increasing, particularly in western Montana and adjacent to larger cities. Contact your local zoning board for more information.

Metal Mine Reclamation
Also known as the Hard Rock Mining Act, this act requires that persons engaged in exploration be licensed, and that permits be obtained for the development of mining properties. The act provides for reclamation and is administered by the State Board of Land Commissioners. It covers minerals that include any ore, rock, or substance other than oil, gas, bentonite, clay, coal, sand, gravel, phosphate rock, or uranium. An application, bond, and fee are required, and small miner exemption will be granted for quantities less than 36,500 tons per year and less than 5 acres unreclaimed disturbance per operation.

Montana Water Quality Act
This state law and related regulations provide for the classification of surface water, establish surface water quality standards, and establish a permit program to control the discharge of pollutants into state water. An application must be submitted at least 180 days prior to beginning any work that would result in a discharge. The permit must be obtained before any discharge can occur and will include water quality limitations and require self-monitoring by the permittee of effluent quality. The Department of Health and Environmental Sciences administers this law.

Natural Streambed and Land Preservation Act
Commonly known as the 310 permit, this state law requires any private persons or organizations (non-governmental), before installation of any activity on private or public land within the high water marks of a perennial flowing stream, to gain approval from the board of supervisors of the local conservation district. If no conservation district is located in the area, approval of the board of county commissioners is needed. This act requires submission of a "Notice of Proposed Project" and detailed plans, along with a review by the Department of Fish, Wildlife and Parks.

Open Cut Mining
This Montana law covers reclamation and conservation of land subjected to open-cut bentonite, clay, scoria, phosphate rock, sand, or gravel mining. The State Board of Land Commissioners is authorized to enter into contracts with operators. Any operator that removes 10,000 cubic yards or more of a product or overburden in the aggregate is subject to this act. An application, bond, and fee are required.

River and Harbor Act
Section 10 of the River and Harbor Act of 1899 requires that a Department of the Army permit be issued by the Corps of Engineers for the performance or placement of any work in navigable water in the United States. For example, the Kootenai River is considered to be a navigable water of the United States from Jennings upstream to the Canadian border. Contact the Seattle District for permit requirements on this water body.

The Missouri River from Three Forks to the state line and the Yellowstone River downstream from Emigrant also are considered navigable waters. Contact the Omaha District of the Corps for permit requirements on these rivers.

State and Federal Environmental Protection Acts
Commonly referred to as MEPA (Montana Environmental Protection Act) and NEPA (National Environmental Protection Act), both these acts require preparation of an environmental assessment (EA) for projects on federal land or projects on which government money is spent. Technical assistance (e.g., that supplied by SCS to ranchers) is not considered government project money.

An EA must be prepared before any permit is issued. The normal time span ranges from 15 to 60 days, depending on the complexities involved. If preparation of an environmental impact statement (EIS) is required, the entire process could take more than a year. For details, contact the state or federal agency responsible for management of the land. Private land may be affected indirectly if impacts occur on these lands and if a project is directed toward the impact from federal land. In these instances, a permit on federal land would not be issued.

Stream Protection
Often referred to as the 124 permit, this regulation's requirements are similar to those for the 310 permit. This regulation, however, applies only to state, county, municipal, or subdivisions of state government or federal agencies—not individuals working on public lands, unless the individual is acting as an agent of an agency or working under contract for an agency. The Department of Fish, Wildlife and Parks must be notified when any project will obstruct, damage, diminish, destroy, change, modify, or vary the natural existing shape and form of any stream or its banks or tributaries by any type or form of construction, whether performed by the government or private parties. An application and permit are required on state land. National forest land is included by a Memorandum of Understanding that invites notification of projects by national forests and participation by the Department of Fish, Wildlife and Parks. Projects undertaken by established irrigation districts are exempt.

Water Rights
Before a person can divert or impound water for a new use, or change an established water use in any way, that person must receive a permit from the Department of Natural Resources and Conservation. This includes water removed from a stream for the purpose of dredge mining. Most holders of existing water rights were required to refile those rights in compliance with the current adjudication statute (Senate Bill 76) before January 1, 1982. Since situations vary both for new and established rights, please contact your local water resources regional office.

Investigation of Regulatory Violations

APPENDIX G

INVESTIGATION OF REGULATORY VIOLATIONS

I. RECOMMENDED PROCEDURE FOR INVESTIGATING REGULATORY VIOLATIONS

A. Receive complaint.
  1. Receive information received, including complainant's name, address, availability as a witness, names of other witnesses. If likely to be unavailable, affidavit is a possibility.
  2. Verify information received.
    a. Visit the general area (cannot go on property itself, but can take pictures).
    b. Compile relevant information from existing records.
      1. Location of property.
      2. Owner (official records and Building Department records).
      3. Determine if there appears to be a violation.

B. Contact the alleged violator by letter (Certified).
  1. Note receipt of complaint and explain the problem and regulation.
  2. Ask for opportunity to discuss the problem. (Withhold judgment of violation until all facts are known.)
  3. Request permission to enter the property to determine if, in fact, a violation has occurred.

C. Visit the site if owner/occupier permits (see II.B below) to determine if a violation has occurred.
  1. If owner/occupier is present, make mental notes, but take photos only by permission. Discuss requirements of regulation in question and what things constitute the violation. Structure what items you want to look for, mentally or on a list.
  2. If owner/occupier did not wish to be present, make notes, but take photos only if owner/occupier understood you would be doing so. (Photos may be taken of anything visible from public property.)
  3. If owner/occupier refuses permission to enter, a search warrant may be obtained (see II.B. below).
  4. In either case, no physical evidence may be taken (including photos) without consent of owner or search warrant.
  5. Immediately after leaving the scene, record your observations. Note time and date you left the scene.
  6. Investigation files are confidential until a court case is filed.
  7. Make notes of every phone conversation on alleged violation.

D. Ask for voluntary compliance by letter informing alleged violator of regulation(s) in question and providing a time by which compliance is expected. State options in letter.

E. If no compliance is obtained, compile report and send to the City or County Attorney. The report should contain the following:
  1. Citation of regulation violated.
  2. Description of activity in violation.
  3. Name and address of property owner and/or occupier of land.
  4. Recorded observations of the site; conversations with alleged violator.
  5. Names and addresses of witnesses and complainant.
  6. Photographs. (Records of name of photographer, type of camera and film, where film was developed, and every person who had custody of the firm should be kept in OCD file for later use if litigation occurs.)

II. INVESTIGATIVE TOOLS AND CRIMINAL VIOLATIONS

A. Investigate subpoena - Order from the court made to person, witness or defendant, to appear in court. It is only obtained through the Attorney General or County Attorney's Office. It can be used before a complaint is actually filed, and must show it is necessary and proper for the investigation.

B. Searches and seizures - The defendant cannot be made to incriminate himself/herself - 4th Amendment.
  1. Search warrants - must show probable cause, facts showing a crime has been committed, and the details and evidence one hopes to obtain. A police officer must deliver the warrant to the accused.
  2. Warrantless searches - cannot be used for gathering evidence for prosecution, but can be used for routine inspections only.
  3. Searches and seizures can be used for 4 instances:
    a. Lawful arrest.
    b. With consent of the accused.
    c. Under authority of valid search warrant.
    d. Under authority and in scope of lawful inspection granted by law.

C. Affirmative Defense - If a violator can prove any of the following he/she cannot be found guilty:
  1. Regulation was defined administratively and was unknown by person.
  2. Regulation has not been published.
  3. Person could not have acquired knowledge by exercising due diligence.

D. Open Field Inspection
  1. Anything observed as being in violation is admissible in court.

Violations of Floodplain/ Floodway Regulations

APPENDIX H

VIOLATIONS OF FLOODPLAIN/FLOODWAY REGULATIONS

"It is unlawful for a person to establish an artificial obstruction or nonconforming use within a designated floodplain or a designated floodway without a permit from the department or the responsible political subdivision." § 76-5-404(1), MCA.

Public Nuisance

An artificial obstruction (not exempt) in a floodplain/floodway is a public nuisance. § 76-5-404 (1), MCA.

Remedies

3 options for violations. § 27-30-202, MCA.

1. Criminal Indictment
   - misdemeanor - offense of maintaining a public nuisance. § 45-8-111, MCA.
   - punishable by not more than $100 fine or 10 days imprisonment. § 76-5-110, MCA.
   - each day separate offense. § 76-5-110, MCA.
2. Civil Action
   - Abatement
   - Injunction, or
   - Order of abatement. § 45-8-12(2), MCA. (Every public nuisance may be abated and the person maintaining such nuisance and the possessor of the premises who permits the same to be maintained may be enjoined from such conduct in an action in equity in the name or the state of Montana by the county attorney or any resident of the state. § 45-8-112(1), MCA. Private action only where nuisance specially injurious to person. § 27-30-203, MCA.)
   - Damages.
3. Abatement
   - Removal or destruction of nuisance. § 27-30-204, MCA.

The Floodway

APPENDIX I

THE FLOODWAY

A community participating in the NFIP's Regular Phase usually has a detailed Flood Insurance Study completed for it by the Federal Emergency Management Agency (FEMA). This study describes flood hazards in the community and, if prepared in enough detail, designates a regulatory floodway.

A floodway is defined as the channel of a stream plus adjacent overbank areas that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases (a half foot) in flood heights. A floodway divides the floodplain into two parts: the floodway and the flood fringe. The floodway is the area of the floodplain that must be reserved to carry flood water so that flood damage is not increased in the rest of the 100-year floodplain flood fringe.

WHY A FLOODWAY?

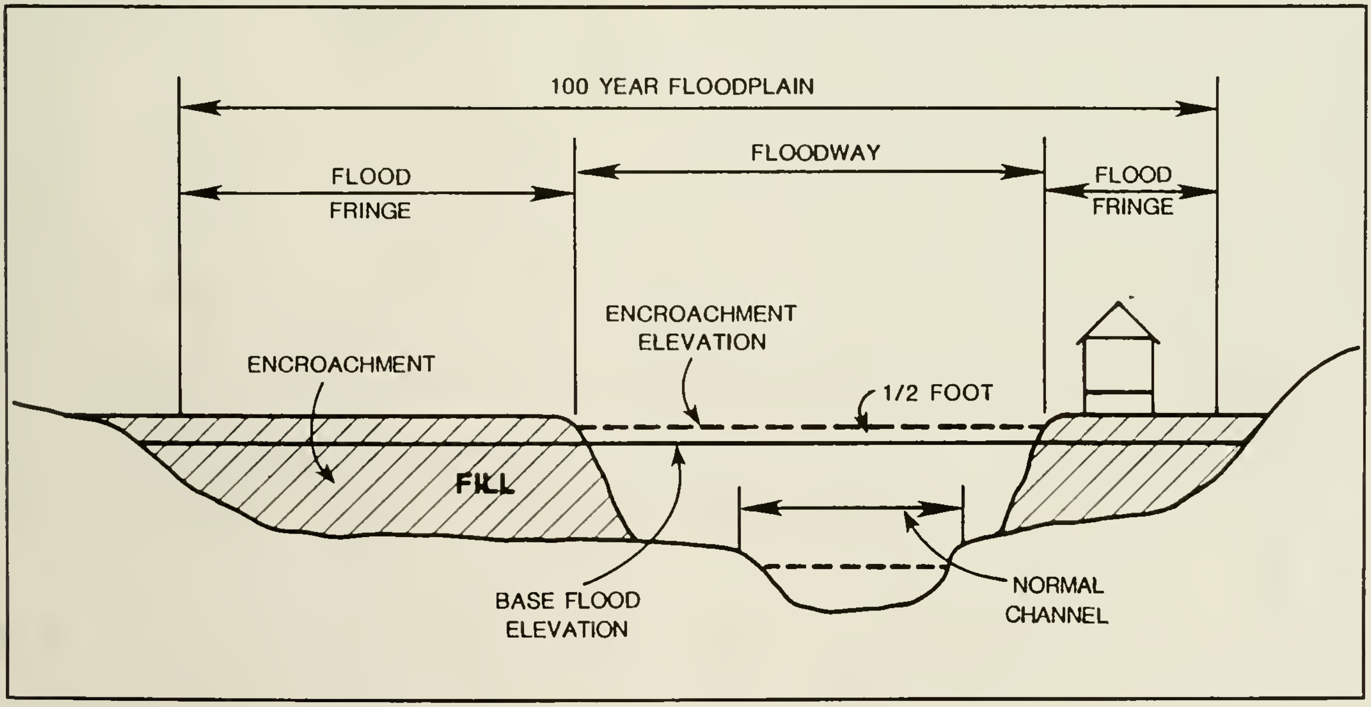
A community that participates in the NFIP must ensure that new floodplain development meets the program's standards. Essentially, these standards require that new structures be protected from the 100-year flood event. The level to which this flood reaches is called the base flood (or 100-year) elevation. If a new structure is built with its lowest floor at or above the base flood elevation, it should be safe from flood damage. What happens, though, if the base flood elevation changes and is increased?

Base flood elevations can be increased by floodplain obstructions. For example, if dikes are constructed on both sides of a river channel, they will constrict the river's floodplain and cause flood water to rise and back up, which increases upstream flood heights. To avoid the possibility of raising the base flood elevation, the NFIP asks a community to reserve a portion of the floodplain (the floodway) nearest to the channel to pass flood water without causing a significant increase.

FEMA has determined a significant increase to mean the maximum of a half-foot rise in the base flood elevation. In other words, if all areas outside the floodway are obstructed or filled in, the base flood elevation will not be raised by more than a half foot. Any obstructions placed in the floodway, therefore, would exceed the maximum half-foot rise allowed.

DETERMINING A FLOODWAY

The floodway is determined by "squeezing in" a community's floodplain boundary (done by a computer hydraulic model) until the base flood is raised a half-foot. At times, the rise will measure less than a half-foot at certain points to keep the increase from exceeding a half-foot at other points within the study area or to avoid excessive velocity. This "squeezing in" simulates building a wall from both sides of the floodplain toward the center of the channel.



The "wall" could be fill, structures, a levee, or any physical obstruction. When the imaginary obstruction has constricted flood flow enough to raise the base flood elevation a maximum of a half foot, the limits of the obstruction define the floodway's boundary.

In the past, these boundaries were placed on a Flood Boundary Map. Since these maps no longer are printed, the boundaries now are placed on the Flood Insurance Rate Map (FIRM) provided to the community, along with the Flood Insurance Study.

Normally, floodway boundaries are determined by a computer model that applies the equal degree of encroachment rule. This rule requires that the quantity of floodwater conveyed on both sides of the watercourse be reduced by an equal percentage when the encroached floodway boundary is developed.

This rule is based on the legal need to treat similarly situated property owners in a similar manner. In practice, however, the rule is not always followed for a number of reasons. These involve property ownership, topography, existing development patterns, and comprehensive land use plans. Any of these factors may justify modifications to the equal degree of encroachment rule. As such, FEMA generally works closely with a community when identifying boundaries to make sure that the defined floodway meets the NFIP standards and fulfills the community's particular needs.

Advantages

An identified floodway on a Flood Boundary Map or a FIRM eases a community's task of administering its floodplain ordinance. When a floodway is identified, the floodplain administrator can determine whether a proposed floodplain development is in the floodway. If it is in the floodway, it will cause a rise. Without the floodway, floodplain administrators always must question whether proposed development will affect existing base flood elevations. (This information is included in the North Dakota State Water Commission's *1987 Guidebook for Local Floodplain Administrators.*

How to Read a Flood Insurance Rate Map (FIRM) with Floodway

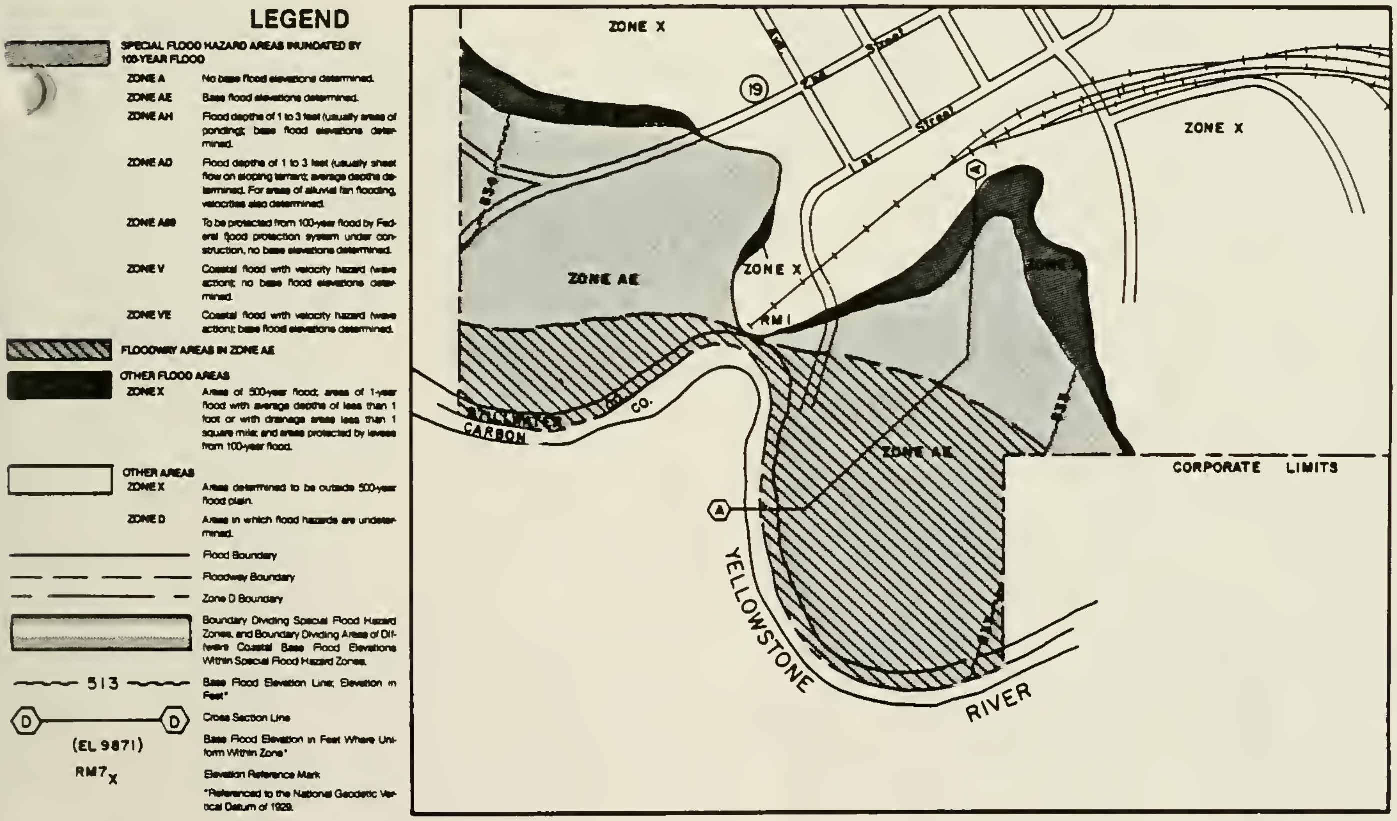
APPENDIX J

HOW TO READ A FLOOD INSURANCE RATE MAP (FIRM) WITH FLOODWAY

FEMA recently began using a one-map system for new flood insurance studies initiated after October 1, 1985. This single map replaces the old FIRM and floodway maps, with all information now incorporated into one FIRM map.

The flood-hazard zones also have been changed on the new FIRM. This new format includes the following changes.

- Zones A1 through A30, representing the 100-year floodplain, have been condensed into a single zone known as AE.
- Zone B, representing the 500-year floodplain, has been changed to Zone X and is shaded on the map.
- Zone C, representing areas of minimal flooding, has been changed to Zone X and is unshaded on the map.
- The floodway now is shown as a cross-hatched area in Zone AE.
- The floodway fringe is shown as the AE zone that is not cross-hatched. The floodway fringe is not specifically mentioned in the map legend.


LEGEND
SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD
ZONE A — No base flood elevations determined.
ZONE AE — Base flood elevations determined.
ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE A99 — To be protected from 100-year flood by Federal flood protection system under construction, no base elevations determined.
ZONE V — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
ZONE VE — Coastal flood with velocity hazard (wave action); base flood elevations determined.
FLOODWAY AREAS IN ZONE AE
OTHER FLOOD AREAS
ZONE X — Areas of 500-year flood; areas of 1-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.
OTHER AREAS
ZONE X — Areas determined to be outside 500-year flood plain.
ZONE D — Areas in which flood hazards are undetermined.
Flood Boundary
Floodway Boundary
Zone D Boundary
Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.
513
Base Flood Elevation Line; Elevation in Feet*
D
D
Cross Section Line
(EL 9871)
Base Flood Elevation in Feet Where Uniform Within Zone*
RM7X
Elevation Reference Mark
*Referenced to the National Geodetic Vertical Datum of 1929.
ZONE X
Street
Street
19
ZONE X
ZONE AE
ZONE X
ZONE X
RM1
836
STILLWATER CO.
CARBON
ZONE AE
CORPORATE LIMITS
A
YELLOWSTONE
RIVER

How to Read a Floodway Map (FBFWM)

APPENDIX K

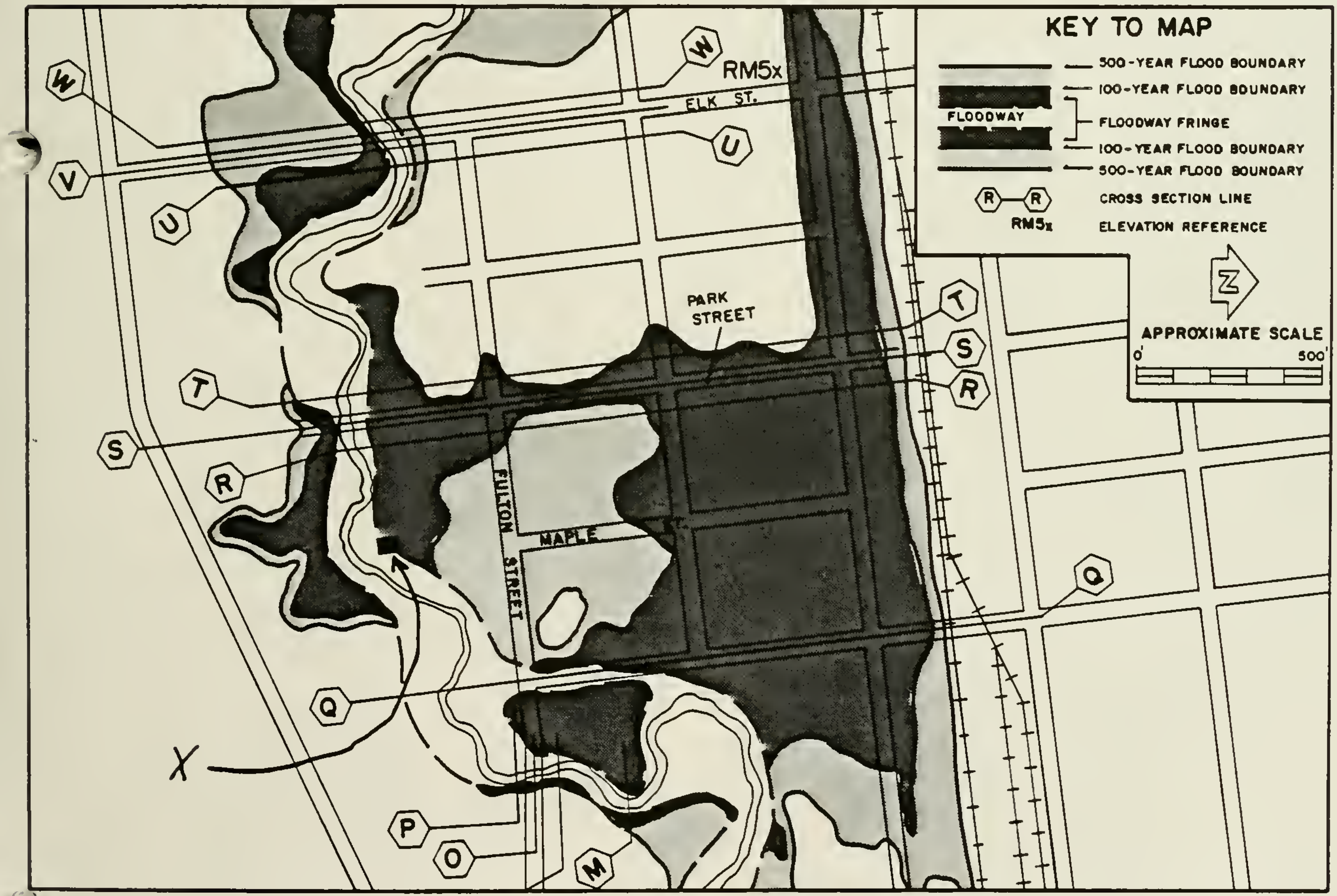
HOW TO READ A FLOODWAY MAP (FBFWM)

A Flood Boundary Floodway Map (FBFWM), which accompanied all Flood Insurance Studies printed prior to 1986, is used for regulatory purposes by the community. It shows the floodway (the white areas between the shaded areas) and floodplain boundaries (the darker-shaded areas are the limits of the 100-year event and the lighter shades show the limits of the 500-year event).

To locate a site on the map, measure the distance on the ground between the site and an identifiable point (bridge, river channel, reference mark, etc.). Using the map scale, convert these figures and plot the site on the map. For example, point X is 400 feet east of the Park Street Bridge and 340 feet due south of the intersection of Maple and Fulton. It is located in the floodway.

Cutting across the floodplain are a series of lines, tagged with letters, called cross-sections. Flood elevations are developed for each of the cross-sections and are displayed on flood profiles.

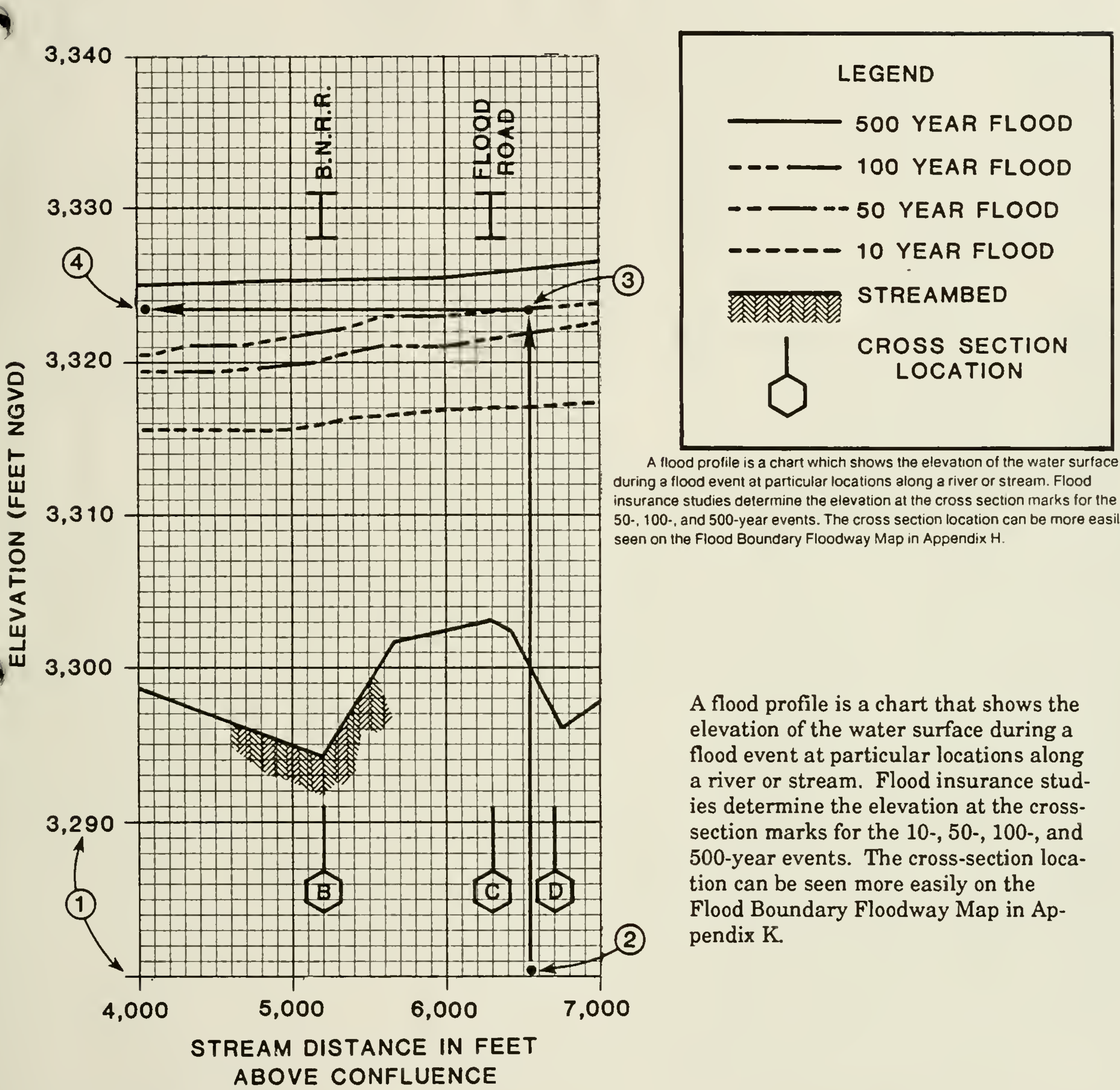
Communities use the information from the FBFWM and the flood profiles to regulate development in the floodplain to meet the standards of the NFIP.



Reading a Flood Profile

APPENDIX L

READING A FLOOD PROFILE



A flood profile is a chart which shows the elevation of the water surface during a flood event at particular locations along a river or stream. Flood insurance studies determine the elevation at the cross section marks for the 10-, 50-, 100-, and 500-year events. The cross section location can be more easily seen on the Flood Boundary Floodway Map in Appendix H.

A flood profile is a chart that shows the elevation of the water surface during a flood event at particular locations along a river or stream. Flood insurance studies determine the elevation at the cross-section marks for the 10-, 50-, 100-, and 500-year events. The cross-section location can be seen more easily on the Flood Boundary Floodway Map in Appendix K.

Reading a Flood Profile

1. First, check the scale. On the example above, each line on the horizontal axis represents 100 feet along the stream. The vertical axis lines represent 1 foot elevation increments above mean sea level.
2. Next, locate the point of concern on the horizontal axis. On the example, the point of concern is about 200 feet upstream from Flood Road.
3. From the point of concern, follow the vertical line to the intersection of the 100-year Flood Event Line.
4. Finally, to determine the elevation, follow the horizontal line to the vertical axis. At the point of concern, the 100-year elevation is 3,323.5 feet MSL.

About Flood Insurance

APPENDIX M

ABOUT FLOOD INSURANCE

What Is Flood Insurance?

The National Flood Insurance Program (NFIP) was created to provide affordable flood insurance to property owners in floodprone areas and to promote good floodplain management so future developments will not suffer flooding damage. The NFIP is administrated by the Federal Emergency Management Agency (FEMA) and carried out by local community administrators.

Who Can Buy Flood Insurance?

Flood insurance can be purchased by anyone in a community who participates in the National Flood Insurance Program (NFIP), whether or not that person's property is located in the floodplain. Flood insurance is voluntary unless required as a condition of a mortgage.

Where Can I Buy Flood Insurance?

From any licensed property or casualty insurance agent.

What Does It Cover?

Any walled and roofed structure can be insured from direct loss caused by the general condition of flooding. Flooding is defined as a general and temporary condition of partial or complete inundation of normally dry land by the overflow of water or surface water. Property declared to be in violation of a state or local floodplain regulation can be denied coverage.

What About Basements?

For flood insurance purposes, a basement is defined as having its floor subgrade on all sides. The NFIP limits flood insurance coverage in basements and in areas below the lowest elevated floor of an elevated building.

- Unfinished structural elements (unfinished sheetrock)
- Stairways and staircases attached to buildings not separated by elevated walkways
- Sump pumps
- Well water tanks and pumps
- Oil tanks (and oil in them)
- Cisterns (and water in them)
- Natural gas tanks
- Furnaces
- Hot water heaters
- Clothes washers and dryers
- Food freezers
- Air conditioners
- Heat pumps
- Pumps and/or tanks used in conjunction with solar energy systems
- Electric junction circuit boxes

Items not covered include:

- Finished basement walls, floors, ceilings, and other improvements to a basement except those needed for fireproofing.
- Enclosures below lowest elevated floor of elevated buildings.
- Contents, machinery, and equipment in basements other than those specifically listed as being covered.
- Contents below lowest elevated floor of elevated buildings.

How Much Does Flood Insurance Cost?

Insurance premiums are based on the relation of the lowest floor of the home to the base flood elevation. Policy premiums will differ. Each new and renewal policy will be charged an expense constant of $45 per policy and a federal service fee of $25.

Amounts of insurance coverage available are summarized below.

REGULAR PROGRAM
Structural Coverage

	Basic	Additional	TOTAL Coverage Available
Single Family Residential	$ 45,000	$140,000	$185,000
Other Residential	$130,000	$120,000	$250,000
Non-Residential	$130,000	$ 70,000	$200,000

Rates per $100 of coverage, varies with risk.

REGULAR PROGRAM
Contents Coverage

	Basic	Additional	TOTAL Coverage Available
Single Family Residential	$ 15,000	$ 45,000	$ 60,000
Other Residential	$ 15,000	$ 45,000	$ 60,000
Non-Residential	$115,000	$ 85,000	$200,000

Rates per $100 of coverage, varies with risk.

Policyholders may choose to retain the $500 standard deductible and current premium schedule, or they may select one of the optional larger deductibles with a reduced premium level shown at the right). Optional deductibles selected for building coverage and contents coverage need not be the same.

Note: In certain situations, the selection of an optional deductible may not be acceptable under the terms of the mortgage. Approval from your lender may be necessary before you commit yourself to a substantially increased deductible.

One- to Four- Family Units
BUILDING AND CONTENTS POLICIES

Building/Contents	Discount
$400/$500	Standard
$1000/$1000	10%
$2000/$1000	15%
$3000/$1000	20%
$4000/$2000	30%
$5000/$2000	35%

Is There A Waiting Period for flood insurance?

Waiting periods before flood insurance becomes effective are different, depending on the individual circumstances. Some examples include the following:

Initial Coverage (five-day waiting period) - The date upon which a new policy goes into effect is the fifth calendar day after the date of application and payment of premium. If the premium payment does not accompany the application, the waiting period begins when the premium payment is made.

Transfer of Title (no waiting period) - When property changes ownership, new coverage on the property is effective at the time of title transfer, provided the flood insurance policy is applied for and premium payment is made at the time of or prior to the transfer of title.

Additional Coverage (five-day waiting period) - The date for additional coverage on an existing policy is on the fifth calendar day following the premium payment date.

Flood insurance does not cover any damage in progress.

Did You Know?

Sewer backups and water seepage are not covered unless the property has been damaged simultaneously by a flood.

The insured is responsible for protecting the insured property from an impending flood and for preserving and protecting the property after flood damage has taken place.

Losses caused by modifications to the insured property or to the premises on which the property is located that materially increase the flood risk are not covered.

Willful misrepresentation or concealment of material facts (including facts relevant to the rating of this policy) by the issuing agent, the insured agent, or the insured renders the policy void.

On policy renewals, recertification questionnaires may be sent to policyholders from FEMA to recertify the rating information. Misrepresentation here also may render the policy void.

If your property is in imminent danger of flooding, the expenses you incur for sandbags, pumps, or fill for temporary levees (up to $500) are a covered loss.

Before, During, and After a Flood

APPENDIX N

WHAT TO DO BEFORE A FLOOD

Whether caused by melting snow, rain, or ice jams, floods damage homes and property and leave in their wake the arduous task of cleaning up.

Residents facing the possibility of flooding should take precautions to minimize disruption to their families and protect their property.

Even if flooding appears to be a remote possibility, consider actions that can be taken if flood waters threaten your community. These tips can help prevent your being victimized by a flood.

- **Have Emergency Supplies on Hand**
  Keep a working portable radio and flashlight on hand. Make provisions for other shelter in case you would be unable to reach your home. Keep on hand, or know where to obtain during times of emergency, materials such as sandbags, fill, plywood, plastic sheeting, and other materials that can aid in protecting property.

- **Protect Valuables**
  Keep insurance policies, legal documents, and other valuables in a place safe from flooding.

- **Buy Flood Insurance**
  Contact your property agent about purchasing flood insurance. Ordinary homeowner policies do not cover losses caused by overland flooding. In most instances, there is a five-day waiting period is required before flood insurance policies go into effect. Read your policy know what your flood insurance covers.

- **Make an Itemized List of Your Property**
  By itemizing your personal property, you will have a record if flooding does occur. If they are significant, uninsured flood losses can be tax-deductible. Photographs of your home—inside and out—are helpful.

- **Know Your Community's Flood Preparedness Plan**
  How does your community deal with flooding?

REMEMBER

If you are flooded out, you don't have to be wiped out!

WHAT TO DO DURING A FLOOD

Residents of floodplains face the risk of devasting floods. Geologically, however, that's how floodplains are formed—from floods.

When flood warnings are issued and when the water is rising, the safety of people and property is the most important consideration. If the worst happens, property can be protected against rising waters by taking certain precautions.

- **Move Contents to a Safe Place**
  All damageable items should be moved from the premises. This includes appliances, furniture, food, valuables, and clothing. Outdoor possessions such as patio furniture, garbage cans, tools, gas tanks, etc. should be anchored or relocated as they may be swept away.

  Note: If covered by a flood insurance policy, the relocation of possessions to a safe place and the expense of property protection is reimbursable up to the standard deductible of $500 per policy. A $50 deductible applies to these property protection measures.

- **Shut Off All Utilities**
  Electricity, gas, and water should be shut off at the main power switches and valves. Exercise extreme caution if these areas already are inundated by flood water. With water wells, seal and close any openings to the water supply.

- **Protect Windows**
  Board up windows or use shutters to prevent glass from breaking or shattering.

- **Secure Safe Drinking Water**
  Fill containers with clean water in case regular supplies become contaminated.

- **Keep a battery-powered radio tuned to a local station, and follow any emergency instructions that are broadcast.**

If evacuation becomes necessary, remember: FLOODS ARE DECEPTIVE! If possible, avoid flooded areas and avoid walking through flood waters that are more than knee-deep. Have evacuation preparations ready ahead of time. Also:

- **Move Quickly and Calmly**
  Don't wait until the last minute to leave. Take a flashlight and portable radio with you.

- **Take Personal Necessities**
  Have personal essentials ready, such as medication and extra clothing.

- **Evacuating by Car**
  When evacuating by car, stock the car with nonperishable foods, water, blankets, a first aid kit, a flashlight, and dry clothing. Keep the gas tank filled since gasoline may not be readily available in the area.

- **Avoid Driving over or in Flooded Areas**
  Parts of the road may be washed out. If your vehicle stalls in a flooded area, leave the vehicle and proceed to higher ground. Nationwide, many deaths have been caused by people's attempts to move through floods in vehicles.

If you become caught in the house by rising waters, move to the second floor or, if necessary, to the roof. Always keep a flashlight and a portable radio handy. WAIT where you are—don't attempt to swim to safety. Evacuation teams will be active during this time.

Whether there are several days or only a few hours before a flood strikes, be prepared to contend with what ever flooding may bring.

WHAT TO DO AFTER A FLOOD

Floodplain residents must be prepared to deal not only with the flood, but also with the aftermath of flooding. Be cautious when reentering structures and follow these reminders.

- **Before Entering a Building**
  - Check the premises for obvious structural damage to make sure the building is not in any danger of collapsing. Shut off all outside gas lines and air the house to remove any gas fumes.
- **Upon Entering the Building**
  - Do not use open flame as a source of light since gas fumes still may be trapped inside; use a flashlight instead.
  - Watch for electrical shorts or live wires. Do not turn on any lights. Turn off the main power source and have an electrician check the electrical system.
- **If You Have Flood Insurance**
  - If your home, apartment, or business has suffered flood damage, call the agent who issued your flood insurance policy. The agent will submit a loss form, and an adjuster will be sent to inspect your property as soon as possible.
  - Perishable items that are unsanitary should be listed and photographed before discarding. Throw out fresh food and opened medicine that may have come in to contact with flood waters.
  - Furniture and other hard goods should be rinsed off and kept for the insurance adjuster's inspection.
  - Take photographs of the damage done to your building and its contents.
- **Proceed with Immediate Cleanup Measures**
  - Cover broken windows and holes in the walls to prevent further damage.
  - Take all wooden furniture outdoors, but keep it out of direct sunlight to prevent warping. A garage or carport may provide a place for drying.
  - Shovel out mud while it is still moist in order to give walls and floors a chance to dry. Special attention at this early stage should be given to cleaning out heating and plumbing systems.
  - Flooded basements should be drained and cleaned as soon as possible. Remember, however, that structural damage can occur by pumping out the water too quickly. After the surrounding flood waters have subsided, begin draining the basement in stages, about one-third of the water volume each day.
- **Remember**
  - Water for drinking and food preparation should be disinfected before using by boiling it vigorously for 10 minutes or by mixing a half teaspoon of liquid commercial laundry bleach with 2 gallons of water and letting the water stand for five minutes. Remove the flat taste by pouring the water from one container to another or by adding a pinch of salt to the water.
  - For a good deodorizer when cleaning major kitchen appliances, add 1 teaspoon of baking soda to a quart of water.
  - Mildew can be removed from dry wood with a solution of 4 to 6 tablespoons of tri-solium phosphate, 1 cup liquid chlorine bleach, and 1 gallon water.
  - Clean metal at once; a light coat of kerosene wiped on iron will prevent it from rusting.
  - Aluminum will brighten by scrubbing it with a solution of vinegar, cream of tartar, and hot water.
  - Scour all utensils and, if necessary, use fine steel wool on unpolished surfaces.
  - Once plastered walls have dried, brush off loose dirt. Wash with a mild soap solution and rinse with clean water; always start at the bottom and work up. Ceilings are done last.
  - Separate all laundry items to avoid running colors. Clothing or household fabrics should be allowed to dry slowly, away from direct heat, before brushing off loose dirt. Rinse the items in lukewarm water to remove lodged soil. Then wash in lukewarm water with a mild detergent; rinse and dry in sunlight.

NFIP
Community Status Book

APPENDIX O

National Flood Insurance Program
Community Status Book
Federal Emergency Management Agency
Federal Insurance Administration
Washington, D.C. 20472

MONTANA

Purpose

This book provides information about:

- communities participating in the National Flood Insurance Program (42 U.S.C. 40014128) - Section I.

- communities which are not participating in the National Flood Insurance Program but have had special flood hazards identified by the Federal Insurance Administration - Section II.

Its purpose is to:

- assist lenders in determining whether or not flood insurance must be required as a condition of Federal or federally related financial assistance.

- assist property owners and insurance agents in determining whether or not flood insurance is available in a particular community, and whether a map showing flood zones is available.

- assist Federal agencies in meeting their responsibilities under Executive Order 11988, floodplain management, to evaluate whether a proposed action will occur in a flood hazard area.

- assist State and local agencies by providing information for floodplain management.

- assist any other members of the general public who may be interested in the information contained within this book.

Section I

Section I of this book lists communities PARTICIPATING in the National Flood Insurance Program. Flood insurance policies for residential and commercial properties and their contents located in the communities listed may be purchased from any insurance agent or broker licensed to sell property or casualty insurance and in good standing in all the states in which the agent is licensed. Agents may obtain information about coverage, rates, etc., by calling the National Flood Insurance Program toll free at 1-800-638-6620, by calling the Telecommunication Device for the Deaf (TDD) toll free at 1-800-447-9487, or from any private sector property insurance company participating in the Write Your Own (WYO) Program.

Column 1- (COMMUNITY NUMBERS). These six digit numbers are either the same number or the same first six digits of the community number (or COMMUNITY PANEL NUMBER) appearing on the FIA flood map for the community. The alphabetic suffix at the end of the number indicates whether the currently effective map is a revision of an earlier map (e.g., "A" normally indicates a first edition, "B" a first revision, etc.). This number and the suffix, if any, must be written on all flood insurance policies.

Column 2 - (COMMUNITY NAME). This indicates the name of the community, followed by the name of the county in which it is located. When the community is a county, only its unincorporated areas are referred to; incorporated areas are listed individually as township, city, village, etc.

Column 3 - This indicates THE DATE OF THE COMMUNITY'S ENTRY INTO THE REGULAR OR EMERGENCY PROGRAM of the National Flood Insurance Program. The symbol (R) following the date indicates Regular Program; if no parenthetical symbol appears after the date, the community is participating in the Emergency Program.

Column 4 - This indicates THE EFFECTIVE DATE OF THE CURRENTLY EFFECTIVE FLOOD MAP OF THE COMMUNITY. This date also appears on the flood map of the community. If there is no date in this column, a flood map for the community has not yet been published, but the community is still participating in the National Flood Insurance Program.

NOTE: If a date appears in both columns, then the purchase of flood insurance is required as a condition of Federal or federally related financial assistance for construction or acquisition of buildings located within the special flood hazard areas as shown on the FIA flood maps. (including FHA and VA mortgage guarantees, mortgage loans from federally regulated lending institutions, Federal disaster assistance, etc.)

Section II

Section II of this book lists communities which are NOT PARTICIPATING in the National Flood Insurance Program, but which have an FIA flood map delineating the special flood hazard areas in the community.

Column 1- same as Column 1 described above.

Column 2- same as Column 2 described above.

Column 3- HAZARD AREA IDENTIFIED. This is the effective date of the first FIA flood map of that community. There may be other, more recent maps for the community.

Column 4- DATE ON WHICH SANCTIONS APPLY. Effective on this date, no direct Federal assistance (including FHA or VA mortgage guarantees) can legally be provided for the acquisition or construction of buildings in the special flood hazard areas shown on the FIA map of this community. To obtain up-to-date information on whether the sanction on Federal assistance still applies for their community, call the Federal Emergency Management Agency (202) 646-3444.

Symbols

NSFHA - The community has no special flood hazard areas and a flood map for the community has not been published. Although it may not be subject to the 100-year flood, floods of a greater magnitude could occur there. In addition, certain structures may be damaged by local drainage problems. The community is ALL ZONE C for flood insurance rating purposes.

L - Minimally Flood Prone, with Flood Hazard Boundary Map converted to Flood Insurance Rate Map by letter, no change in flooding shown on map, no elevation on map.

M - Minimally Flood Prone, no elevation on map.

R - Entry date into Regular Program.

S - Suspended from the National Flood Insurance Program.

F - Effective Map is a Flood Insurance Rate Map. Note, however, that the " Hazard Area Identified" date denotes the date of original identification of the special flood hazard area and is not necessarily the date of the most recent Flood Insurance Rate Map.

W - The community has withdrawn from the National Flood Insurance Program. No flood insurance available. Other sanctions apply. For up-to-date information after suspension date, call the above number.

* - Unincorporated areas only.

> - Date of current effective map is after the date of this report.

- This community has a map with a 10-digit ID number. Each map with such a number will be published as one or more Z-fold panels (like road maps). Each map having more than one panel also has an index show which panels apply to the various sections of a community. Since the 10-digit system permits the revision of individual panels rather than the entire map, the index also shows the correct suffix of the most current panel for a particular location in the community.

Each time a panel is revised and published, the map index is also revised and republished with a new effective date to reflect the panel revision. For community maps with 10-digit ID numbers, the Status Book gives data relating to the index only. The index must be consulted for information on individual panels.

State-Owned Property

Flood insurance is not required for State-owned property in the following states because these states have submitted to FIA satisfactory self-insurance plans against flood loss:

Florida
Georgia
Iowa
Kentucky
Maine
New Jersey
New York
North Carolina
Oregon
Pennsylvania
South Carolina
Tennessee
Vermont

Publication Schedules

This book is published semiannually and is available in separately bound copies for each state, or, if nationwide information is needed, in a bound copy for the entire Nation. Copies are free; to get on the distribution list or change your address, number of copies ordered, etc., call (800) 638-6620 (toll free). To report errors found in this book, call (202) 646-3444.

Updates to this book are published periodically in the Federal Register, which is determinative for the purpose of corrections and legal effect.

Ordering Flood Maps

FIA flood maps and/or indices may be ordered from:

Federal Emergency Management Agency
Flood Map Distribution Center
6930 (A-F) San Tomas Road
Baltimore, Maryland 21227-6227 or call
National Flood Insurance Program
Telephone: 1-800-333-1363

FEDERAL EMERGENCY MANAGEMENT AGENCY
FEDERAL INSURANCE ADMINISTRATION
COMMUNTTIES PARTICIPATING IN THE NATIONAL FLOOD INSURANCE PROGRAM
AS OF MAY 7, 1992
MONTANA

COMMUNITY NUMBER	COMMUNITY NAME		DATE OF ENTRY EMERGENCY OR REGULAR PROG.	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)
300017#	ANACONDA-DEER LODGE COUNTY	DEER LODGE COUNTY	DEC 18, 1985(R)	DEC 18, 1985
300018#	BAKER, CITY OF	FALLON COUNTY	AUG 4, 1988(R)	AUG 4, 1988
300001#	BEAVERHEAD COUNTY*	BEAVERHEAD COUNTY	SEP 30, 1982(R)	SEP 30, 1982
300009#	BELT, TOWN OF	CASCADE COUNTY	DEC 5, 1979(R)	SEP 27, 1985
300143#	BIG HORN COUNTY*	BIG HORN COUNTY	SEP 2, 1981(R)	SEP 2, 1981
300085#	BILLINGS, CITY OF	YELLOWSTONE COUNTY	JAN 2, 1981(R)	JAN 2, 1981
300144#	BLAINE COUNTY*	BLAINE COUNTY	MAY 19, 1987(R)	MAY 19, 1987
300035B	BOULDER, TOWN OF	JEFFERSON COUNTY	APR 15, 1986(R)	APR 15, 1986(M)
300028#	BOZEMAN, CITY OF	GALLATIN COUNTY	MAR 15, 1982(R)	JUL 15, 1988
300058#	BROADUS, TOWN OF	POWDER RIVER COUNTY	MAR 18, 1986(R)	MAR 18, 1986(M)
300145#	BROADWATER COUNTY*	BROADWATER COUNTY	DEC 1, 1986(R)	DEC 1, 1986(L)
300030#	BROWNING, TOWN OF	GLACIER COUNTY	MAR 18, 1986(R)	MAR 18, 1986(M)
300077#	BUTTE-SILVER BOW COUNTY	SILVER BOW COUNTY	SEP 28, 1979(R)	FEB 23, 1982
300139#	CARBON COUNTY*	CARBON COUNTY	NOV 4, 1981(R)	AUG 15, 1990
300008#	CASCADE COUNTY*	CASCADE COUNTY	APR 15, 1980(R)	NOV 16, 1983
300041B	CHESTER, TOWN OF	LIBERTY COUNTY	JUN 1, 1986(R)	JUN 1, 1986(L)
300003#	CHINOOK, CITY OF	BLAINE COUNTY	MAY 19, 1987(R)	MAY 19, 1987
300097#	CHOTEAU, CITY OF	TETON COUNTY	APR 3, 1984(R)	APR 3, 1984
300108A	CIRCLE, TOWN OF	MCCONE COUNTY	APR 15, 1986(R)	APR 15, 1986(M)
300024#	COLUMBIA FALLS, CITY OF	FLATHEAD COUNTY	OCT 15, 1985(R)	OCT 15, 1985(M)
300057B	CONRAD, CITYOF	PONDEROSA COUNTY	JUN 1, 1986(R)	JUN 1, 1986(L)
300067B	CULBERTSON, CITY OF	ROOSEVELT COUNTY	MAY 15, 1986(R)	MAY 15, 1986(M)
300147#	CUSTER COUNTY*	CUSTER COUNTY	SEP 1, 1987(R)	SEP 1, 1987(L)
300060#	DEER LODGE, CITY OF	POWELL COUNTY	APR 15, 1981(R)	APR 15, 1981
300020#	DENTON, TOWN OF	FERGUS COUNTY	JUL 19, 1982(R)	JUL 19, 1982
300088#	DILLON, CITY OF	BEAVERHEAD COUNTY	JUL 5, 1982(R)	JUL 5, 1982
300053B	DODSON, TOWN OF	PHILLIPS COUNTY	JUN 17, 1986(R)	JUN 17, 1986(M)
300033#	DRUMMOND, TOWN OF	GRANITE COUNTY	JUL 5, 1982(R)	JUL 5, 1982
300039#	EAST HELENA, CITY OF	LEWIS & CLARK COUNTY	JUN 4, 1980(R)	SEP 27, 1985
300044#	ENNIS, TOWN OF	MADISON COUNTY	JUN 1, 1986(R)	NOV 19, 1986
300112#	EUREKA, TOWN OF	LINCOLN COUNTY	JUL 2, 1979(R)	JUL 2, 1979
300064B	FAIRVIEW, CITY OF	RICHLAND COUNTY	MAY 15, 1986(R)	MAY 15, 1986(M)
300149#	FALLON COUNTY*	FALLON COUNTY	AUG 4, 1988(R)	AUG 4, 1988
300019#	FERGUS COUNTY*	FERGUS COUNTY	DEC 1, 1982(R)	DEC 1, 1982
300023#	FLATHEAD COUNTY*	FLATHEAD COUNTY	SEP 5, 1984(R)	JUL 15, 1988
300180#	FORT BELKNAP INDIAN RESERVE	BLAINE COUNTY PHILLIPS COUNTY	DEC 17, 1987(R)	DEC 17, 1987(M)
300005#	FROMBERG, TOWN OF	CARBON COUNTY	NOV 4, 1981(R)	NOV 4, 1981
300027#	GALLATIN COUNTY*	GALLATIN COUNTY	AUG 1, 1984(R)	AUG 1, 1984
300151#	GLACIER COUNTY*	GLACIER COUNTY	JAN 1, 1990(R)	JAN 1, 1990(M)

(R) - INDICATES ENTRY IN REGULAR PROGRAM
NSFHA - NO SPECIAL FLOOD HAZARD AREA - ALL ZONE C
> - DATE OF CURRENT EFFECTIVE MAP IS AFTER THE DATE OF THIS REPORT
* - UNINCORPORATED AREAS ONLY
ALL OTHER CODES OR SYMBOLS ARE EXPLAINED ON PAGE 2 OF THIS BOOK

FEDERAL EMERGENCY MANAGEMENT AGENCY
FEDERAL INSURANCE ADMINISTRATION
COMMUNITIES PARTICIPATING IN THE NATIONAL FLOOD INSURANCE PROGRAM
AS OF MAY 7, 1992
MONTANA

COMMUNITY NUMBER	COMMUNITY NAME		DATE OF ENTRY EMERGENCY OR REGULAR PROG.	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)
300178	GLASGOW, CITY OF	VALLEY COUNTY	NOV 12, 1985(R)	(NSFHA)
300152#	GOLDEN VALLEY COUNTY*	GOLDEN VALLEY COUNTY	SEP 16, 1981(R)	SEP 16, 1981
300141#	GRANITE COUNTY*	GRANITE COUNTY	JUL 5, 1982(R)	JUL 5, 1982
300021#	GRASS RANGE, TOWN OF	FERGUS COUNTY	DEC 1, 1982(R)	DEC 1, 1982
300010#	GREAT FALLS, CITY OF	CASCADE COUNTY	SEP 30, 1977(R)	NOV 3, 1981
300186#	HAMILTON, CITY OF	RAVALLI COUNTY	NOV 10, 1989(R)	AUG 3, 1989
300004#	HARLEM, CITY OF	BLAINE COUNTY	MAY 19, 1987(R)	MAY 19, 1987
300175#	HARLOWTON, CITY OF	WHEATLAND COUNTY	SEP 16, 1981(R)	SEP 16, 1981
300179#	HAVRE, CITY OF	HILL COUNTY	DEC 11, 1985(R)	(NSFHA)
300040#	HELENA, CITY OF	LEWIS & CLARK COUNTY	APR 15, 1981(R)	APR 15, 1981
300153#	HILL COUNTY*	HILL COUNTY	JUN 3, 1988(R)	JUN 3, 1988
300095#	HINGHAM, TOWN OF	HILL COUNTY	JUN 3, 1988(R)	JUN 3, 1988
300073#	HOT SPRINGS, TOWN OF	SANDERS COUNTY	OCT 15, 1985(R)	OCT 15, 1985(M)
300154#	JEFFERSON COUNTY*	JEFFERSON COUNTY	JUN 17, 1986(R)	JUN 17, 1986(M)
300006#	JOLIET, TOWN OF	CARBON COUNTY	MAY 19, 1981(R)	MAY 19, 1981
300025#	KALISPELL, CITY OF	FLATHEAD COUNTY	SEP 17, 1980(R)	SEP 17, 1980
300155#	LAKE COUNTY*	LAKE COUNTY	DEC 17, 1987(R)	DEC 17, 1987
300086#	LAUREL, CITY OF	YELLOWSTONE COUNTY	JAN 6, 1983(R)	JAN 6, 1983
300031#	LAVINA, TOWN OF	GOLDEN VALLEY COUNTY	SEP 16, 1981(R)	SEP 16, 1981
300038#	LEWIS AND CLARK COUNTY*	LEWIS & CLARK COUNTY	APR 1, 1981(R)	SEP 4, 1985
300022#	LEWISTOWN, CITY OF	FERGUS COUNTY	JUL 19, 1982(R)	JUL 19, 1982
300042#	LIBBY, CITY OF	LINCOLN COUNTY	JUL 2, 1979(R)	AUG 10, 1982
300177#	LIMA, TOWN OF	BEAVERHEAD COUNTY	MAR 4, 1986(R)	MAR 4, 1986
300157#	LINCOLN COUNTY*	LINCOLN COUNTY	AUG 1, 1980(R)	AUG 1, 1980
300051#	LIVINGSTON, CITY OF	PARK COUNTY	MAY 19, 1987(R)	MAY 19, 1987
300002#	LODGE GRASS, TOWN OF	BIG HORN COUNTY	SEP 2, 1981(R)	SEP 2, 1981
300054#	MALTA, CITY OF	PHILLIPS COUNTY	MAY 19, 1987(R)	MAY 19, 1987
300046	MEAGHER COUNTY*	MEAGHER COUNTY	NOV 13, 1985(R)	(NSFHA)
300014#	MILES CITY, CITY OF	CUSTER COUNTY	FEB 1, 1980(R)	MAR 22, 1983
300048#	MISSOULA COUNTY*	MISSOULA COUNTY	AUG 15, 1983(R)	AUG 16, 1988
300049#	MISSOULA, CITY OF	MISSOULA COUNTY	JAN 6, 1983(R)	AUG 16, 1988
300100#	MOORE, TOWN OF	FERGUS COUNTY	JUL 19, 1982(R)	JUL 19, 1982
300082B	NASHUA, TOWN OF	VALLEY COUNTY	APR 15, 1986(R)	APR 15, 1986(M)
300160#	PARK COUNTY*	PARK COUNTY	JAN 1, 1987(R)	JAN 1, 1987(L)
300117#	PHILIPSBURG, TOWN OF	GRANITE COUNTY	JUL 5, 1982(R)	JUL 5, 1982
300162#	PHILLIPS COUNTY*	PHILLIPS COUNTY	MAY 19, 1987(R)	MAY 19, 1987
300074B	PLAINS, TOWN OF	SANDERS COUNTY	APR 15, 1986(R)	APR 15, 1986(M)
300059#	POWELL COUNTY*	POWELL COUNTY	JUN 3, 1981(R)	APR 15, 1981
300061#	RAVALLI COUNTY*	RAVALLI COUNTY	JUL 19, 1982(R)	JUL 19, 1982
300007#	RED LODGE, CITY OF	CARBON COUNTY	MAY 19, 1981(R)	MAY 19, 1981
300165#	RICHLAND COUNTY*	RICHLAND COUNTY	DEC 4, 1985(R)	DEC 4, 1985

(R) - INDICATES ENTRY IN REGULAR PROGRAM
NSFHA - NO SPECIAL FLOOD HAZARD AREA - ALL ZONE C
> - DATE OF CURRENT EFFECTIVE MAP IS AFTER THE DATE OF THIS REPORT
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ALL OTHER CODES OR SYMBOLS ARE EXPLAINED ON PAGE 2 OF THIS BOOK

FEDERAL EMERGENCY MANAGEMENT AGENCY
FEDERAL INSURANCE ADMINISTRATION

COMMUNITIES PARTICIPATING IN THE NATIONAL FLOOD INSURANCE PROGRAM
AS OF MAY 7, 1992
MONTANA

COMMUNITY NUMBER	COMMUNITY NAME		DATE OF ENTRY EMERGENCY OR REGULAR PROG.	DATE OF CURRENT EFFECTIVE MAP (OR MAP INDEX)
300122	RONAN, CITY OF	LAKE COUNTY	DEC 17, 1987(R)	(NSFHA)
300050#	ROUNDUP, CITY OF	MUSSELSHELL COUNTY	MAR 18, 1986(R)	MAR 18, 1986(M)
300032#	RYEGATE, TOWN OF	GOLDEN VALLEY COUNTY	JUL 20, 1982(R)	JUL 20, 1982(M)
300055	SACO , TOWN OF	PHILLIPS COUNTY	NOV 30, 1983(R)	(NSFHA)
300065#	SIDNEY, CITY OF	RICHLAND COUNTY	DEC 4, 1985(R)	DEC 4, 1985
300078#	STILLWATER COUNTY*	STILLWATER COUNTY	NOV 15, 1985(R)	FEB 4, 1987
300167#	SWEET GRASS COUNTY*	SWEET GRASS COUNTY	AUG 2, 1982(R)	AUG 2, 1982
300168#	TETON COUNTY*	TETON COUNTY	JUL 18, 1983(R)	JUL 18, 1983
300029#	THREE FORKS, TOWN OF	GALLATIN COUNTY	NOV 19, 1980(R)	NOV 19, 1980
300131A	TOWNSEND, CITY OF	BROADWATER COUNTY	SEP 29, 1986(R)	SEP 29, 1986(M)
300170#	TREASURE COUNTY*	TREASURE COUNTY	DEC 18, 1986(R)	DEC 18, 1986(M)
300132#	TROY, TOWN OF	LINCOLN COUNTY	DEC 16, 1980(R)	DEC 16, 1980(M)
300045#	TWIN BRIDGES, TOWN OF	MADISON COUNTY	JUL 3, 1986(R)	JUL 3, 1986(M)
300133	VALIER, TOWN OF	PONDERA COUNTY	NOV 30, 1983(R)	(NSFHA)
300171#	VALLEY COUNTY*	VALLEY COUNTY	JAN 1, 1987(R)	JAN 1, 1987(L)
300172#	WHEATLAND COUNTY*	WHEATLAND COUNTY	SEP 16, 1981(R)	SEP 16, 1981
300047C	WHITE SULPHUR SPRINGS, CITY	MEAGHER COUNTY	APR 15, 1986(R)	APR 15, 1986(M)
300026#	WHITEFISH, CITY OF	FLATHEAD COUNTY	JUL 16, 1979(R)	JUL 16, 1979
300084#	WIBAUX, TOWN OF	WIBAUX COUNTY	MAR 4, 1988(R)	MAR 4, 1988
300142#	YELLOWSTONE COUNTY*	YELLOWSTONE COUNTY	NOV 18, 1981(R)	MAY 2, 1991

TOTAL IN THE FLOOD PROGRAM	100
TOTAL IN THE REGULAR PROGRAM	100
TOTAL IN THE REGULAR PROGRAM BUT HAVING NO SPECIAL FLOOD HAZARD AREA	6
TOTAL IN REGULAR PROGRAM BUT DESIGNATED AS MINIMALLY FLOOD PRONE	27
TOTAL IN EMERGENCY PROGRAM	0
TOTAL IN EMERGENCY PROGRAM WITH THE HAZARD AREA IDENTIFIED	0

(R) - INDICATES ENTRY IN REGULAR PROGRAM
NSFHA - NO SPECIAL FLOOD HAZARD AREA - ALL ZONE C
> - DATE OF CURRENT EFFECTIVE MAP IS AFTER THE DATE OF THIS REPORT
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ALL OTHER CODES OR SYMBOLS ARE EXPLAINED ON PAGE 2 OF THIS BOOK

FEDERAL EMERGENCY MANAGEMENT AGENCY
FEDERAL INSURANCE ADMINISTRATION
AREAS WHICH HAVE HAD SPECIAL FLOOD HAZARD AREAS IDENTIFIED
--NOT IN THE PROGRAM--
AS OF MAY 7, 1992
MONTANA

COMMUNITY NUMBER	COMMUNITY NAME		HAZARD AREA IDENTIFIED	DATE ON WHICH SANCTIONS APPLY
300111	EKALAKA, TOWN OF	CARTER COUNTY	JUL 16, 1976	JUL 16, 1977
300070A	FORSYTH, CITY OF	ROSEBUD COUNTY	MAR 8, 1974	MAR 8, 1975
300150#	GARFIELD COUNTY*	GARFIELD COUNTY	MAR 20, 1979(F)	MAR 20, 1980
300015#	GLENDIVE, CITY OF	DAWSON COUNTY	FEB 15, 1974(F)	JUL 2, 1980(S)
300116A	JORDAN, TOWN OF	GARFIELD COUNTY	JUN 27, 1975	JUN 27, 1976
300159#	MINERAL COUNTY*	MINERAL COUNTY	FEB 14, 1978	FEB 14, 1979
300174#	MUSSELLSHELL COUNTY*	MUSSELSHELL COUNTY	MAY 29, 1979(F)	MAY 29, 1980
300183#	NEIHART, TOWN OF	CASCADE COUNTY	AUG 17, 1982	AUG 17, 1983
300163#	POWDER RIVER COUNTY*	POWDER RIVER COUNTY	MAY 15, 1979	MAY 15, 1980
300164#	PRAIRIE COUNTY*	PRAIRIE COUNTY	MAY 8, 1979	MAY 8, 1980
300166#	ROOSEVELT COUNTY*	ROOSEVELT COUNTY	DEC 4, 1979(F)	DEC 4, 1980
300069#	ROSEBUD COUNTY*	ROSEBUD COUNTY	AUG 2, 1974	AUG 2, 1975
300072#	SANDERS COUNTY*	SANDERS COUNTY	DEC 27, 1977(F)	DEC 27, 1978
300125	SHELBY, CITY OF	TOOLE COUNTY	APR 2, 1976	APR 2, 1977
300127	SUNBURST, TOWN OF	TOOLE COUNTY	JAN 10, 1975	JAN 10, 1976
300173#	WIBAUX COUNTY*	WIBAUX COUNTY	JAN 15, 1980(F)	MAR 4, 1988(S)

TOTAL SUSPENDED FROM EMERGENCY PROGRAM	0
TOTAL SUSPENDED FROM REGULAR PROGRAM	2
TOTAL WITHDRAWN COMMUNITIES NOT IN PROGRAM	0
TOTAL NOT IN PROGRAM WITH HAZARD AREA IDENTIFIED	16
TOTAL NOT IN PROGRAM WITH HAZARD AREA IDENTIFIED FOR MORE THAN ONE YEAR	16

N/A - NOT APPLICABLE AT THIS TIME
(S) - SUSPENDED COMMUNITY
(W) - WITHDRAWN COMMUNITY
(F) - EFFECTIVE MAP IS A FLOOD INSURANCE RATE MAP
* - UNINCORPORATED AREAS ONLY
ALL OTHER CODES OR SYMBOLS ARE EXPLAINED ON PAGE 2 OF THIS BOOK